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ABSTRACT

The conference reported here was held for nurse faculty and physicians from twenty-five family nurse practitioner (FNP) programs based in twenty-one states to provide the participants with an opportunity to consider their common curriculum problems and successes in FNP education. The first half of this booklet contains five paper presentations with the fourth and fifth papers followed by comments made by a reactor panel and the audience. The titles of the papers are (1) "The Potential of the Family Nurse Practitioner Movement," (2) "Five Questions of Family Nurse Practitioner Evaluation," (3) "Nursing Present Tense," (4) "The Role of the Family Nurse Practitioner: Implication for Curriculum Development," and (5) "Clinical Evaluation: An Examination of the State of the Art and Its Application to Nurse Practitioners." The remaining half of this booklet consists of five reports of group discussions held during the conference on adult medicine; child health curriculum; determinants of obstetrics and gynecology curriculum in nurse practitioner training; family and community; and the state of the art in teaching role realignment. A brief summary of conference recommendations concludes the report. (EM)

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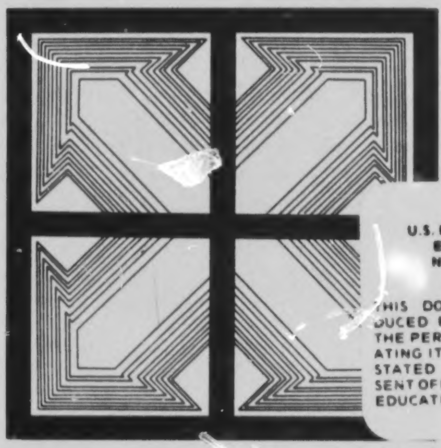
CURRENT DIRECTIONS IN FAMILY NURSE PRACTITIONER CURRICULA



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PROCEEDINGS OF A NATIONAL CONFERENCE
OF REPRESENTATIVES FROM FAMILY NURSE
PRACTITIONER PROGRAMS

CHAPEL HILL, NORTH CAROLINA
JANUARY 29-31, 1976

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FOREWORD

With the advent of midwifery practice in the 1930's, expanding roles for registered nurses in areas of health care traditionally supplied by physicians have been described, particularly in pediatrics, adult and family health, to better meet the needs of the people for health care services. Since the mid-1960's the Division of Nursing has supported the planning and development of programs to prepare nurses for expanded roles, and more recently to increase the numbers of these practitioners.

In the past decade education programs to prepare nurse practitioners have increased, with the more recent innovation, family nurse practitioner (FNP) programs, developing independently in various parts of the country and having little communication among them. Recognizing the contribution that the exchange of ideas could make in enhancing the quality of family nurse practitioner education, the Division of Nursing contracted with the University of North Carolina at Chapel Hill to hold a conference to consider common problems and successes. Physicians and nurse faculty from 25 FNP programs based in 21 States, and the faculty of the host program convened at Chapel Hill in January 1976.

Curriculum was the major focus of the conference and FNP education was discussed in terms of five identified components: role realignment, family and community, adult medicine, pediatrics, and obstetrics/gynecology. This report of the conference proceedings brings together the background papers, responses of four reactors, task group reports, and a summary of the discussions, in the hope that they will be useful to the many people who are eager for information on this subject and are involved in the education and utilization of family nurse practitioners.

Jessie M. Scott

JESSIE M. SCOTT
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The National Conference of Representatives from Family Nurse Practitioner Programs was made possible by the able assistance of many people at many levels. The editors wish to acknowledge the encouragement of the original Planning Committee and the guidance of the consultants from the Division of Nursing, particularly that of Harriet Carroll, who assisted us from the time the conference was funded until the final editing of the report.

We would also like to acknowledge the advice and hard work of all the UNC FNP faculty; the careful attention given the details of arrangements by Albert F. Painter, Jr., Conference Director, Office of Continuing Education in Health Sciences, and the tireless assistance of Joan Anderson, who typed endless correspondence, handled many details, and assisted in the final typing of the report. Finally we would like to thank every participant whose preparation of materials prior to the conference and whose contribution at the time of the conference made this report possible.

PREFACE

Although much had been shared informally among FNP programs throughout the country, the National Conference of Representatives from FNP Programs held in January 1976 was the first formal opportunity for faculties to discuss educational issues in the preparation of FNPs. The University of North Carolina at Chapel Hill entered into a contract with the Division of Nursing, DHEW, to conduct such a conference and publish the proceedings. A committee composed of representatives of the schools of Nursing, Medicine, and Public Health and the Division of Continuing Education for Health Sciences was formed to plan the conference.

Taking into consideration the number of issues to which attention could be directed, the need to bring together people with a reasonable amount of experience in educating nurse practitioners and the limited time which seemed feasible for such a conference, the planning committee decided to establish priorities for inclusion of FNP programs. Only formalized training programs established to prepare registered nurses to become FNPs were invited to participate. These programs were expected to have graduated at least one class, to have included both didactic and clinical experience in a time span of not fewer than 6 months, and to have had as their purpose the preparation of nurses to deliver primary health care, including physical assessment and medical management with medical back-up but not necessarily the physical presence of the physician. Prior to the preparation of a proposal for funding, eight possible issues for consideration were sent to 41 NP programs asking that they be rated in order of priority and/or that other issues be added to the list. Thirty-three responses were received. The objectives of the conference were established on the basis of the responses.

These objectives were:

(1) to identify and rate according to importance course content for the preparation of the FNP in the areas of: medicine, pediatrics, ob/gyn, family and community, and role change;

(2) to share present practices related to evaluation of student progress in clinical performance; and

(3) to stimulate planning for future conferences and further collaboration.

Two representative teaching faculty, a physician and a nurse, were invited from each of the 33 responding programs. Twenty-three physicians and 30 nurse faculty representing 25 programs from 21

States attended the conference. Dr. Katherine Nuckolls was asked to present a paper on the definition of the FNP and implications for curriculum development, and Dr. Glenn Pickard was asked to speak on evaluation of clinical competence. Prior to the conference, those identified to be participants were asked to send materials related to the educational philosophy of their programs, definitions of the FNP, and clinical evaluations. This material was then made available to the speakers for use in preparing their papers. To open the discussion of each paper, two conference participants were asked to serve as reactors. Though these reactors reviewed the papers before the conference, they were themselves requested not to prepare formal responses but to speak informally and briefly. Dr. Frederic Kirkham and Ms. Violet Barkauskas opened the discussion of Dr. Nuckolls' paper, and Ms. Rosemary Pittman and Mr. Robert Koewing served as reactors to Dr. Pickard.

One whole day of the conference was designed for group work to put emphasis on curriculum content needed in preparation of a person for a defined role. Operational definitions of a family nurse practitioner and primary care were established. Preliminary homework was requested of participants as a springboard for group discussions related to curriculum content. A further description of this is included in the introduction to the group reports.

The conference opened with welcoming addresses by Dean Laurel Copp, Vice-Chancellor Cecil Sheps, and Margaret Sheehan, speaking for Jessie Scott. The concluding summary of recommendations reflects evaluations of the conference by participants and final recommendations of group leaders.

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THE POTENTIAL OF THE FAMILY NURSE PRACTITIONER MOVEMENT

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I address you as colleagues and fellow workers in the field of developing improvements in the delivery of personal health services to the people of our Nation. This university has a highly developed interest in these matters—and that is not an accident of fate. It's not simply the result of bringing together deliberately—or through good fortune—characters who have similar notions and can work together. That helps. But what lies behind that on this campus is bespoken in the traditions and history of this institution.

This is the first State university in the Nation. The constitution of the State of North Carolina, written in 1776, provided that there should be a State university, and in 1795 the cornerstone was laid for the first building, which still exists. From the beginning it was always understood that this university would pursue academic objectives with due regard for service to the State and the region. And it has always been characteristic for the people of this State to come to us and say, "What have you done for us lately?" This conference is about the same kind of question. I, for one, welcome this because that kind of discomforting question is very good for people who are faculty members, who are dedicated to their work and who can see all kinds of marvelous things that are yet to come. But because of their obsession with their work, they fail to recognize that what makes the difference between a road and a rut is the height of the walls. Therefore, it is important for these walls to be broken down. I don't say this because it simply sounds like a wise thing to say; I say it this afternoon because it seems to me that what this conference is devoted to stems from issues of that kind.

Let me now very briefly sketch for you the history of our family nurse practitioner program. Six or seven years ago some of us on this campus began to work on the question of what we could do to bring primary care to rural people. We had enough of a sense of history to know that new clinic buildings and economic incentives had no lasting value and what was needed was a new approach, a different framework for the delivery of care, which would solve the problem, or go some distance toward solving it. We didn't simply sit here in Chapel Hill and ruminate about that; we worked with people in towns and villages to learn how they perceived the problems. Out of this work we developed a plan for a demonstration in one little town.

That town had a population that shifted from 389 to 390 to 392, with a surrounding population of some 1,500 to 2,000 people. Leaders came to us from this town and said, "Can you help us find a doctor?"

We said, slowly, "Well, that may not be the answer. Maybe there is something else that can be done. What kind of experience have you had with doctors?"

And they said, "We had two doctors and then we had one, and then we had none, and then one came but he didn't stay very long, because it turned out that he was an alcoholic. Then another one came and he had tuberculosis and he couldn't do very much; he only came because it was his home county . . ." and so on.

So we said, "Let's talk about ways in which something can be done that will be lasting and will not be second class."

At the same time we were also talking amongst ourselves about making it possible for people with different backgrounds and preparations for health care to use those backgrounds and skills to the fullest, without the constraints of an artificial, though traditional, concept of whose job it was to do what and whose turf was what. These two kinds of discussions and explorations were going on simultaneously. We considered developing a physician's assistant program here similar to the one at Duke University, but decided that, although the physician's assistant program appears to have a place in the scheme of things, we would rather develop an educational program for nurses who, with this additional training and experience, could combine what they already know and are dedicated to by way of caring for patients with greater skills in diagnostic and treatment functions. We believed that if that were done we would develop a different kind of person who would not only pick up some of the things that physicians ordinarily do but have less and less time to do, but would also provide something most physicians simply are not prepared to do, in terms of the caring aspect, because of the way they practice in the system today. We interpreted "caring" to mean not only seeing to it that the day-to-day treatment prescribed was understood and carried out but also possessing and using skills in communicating and interacting with patients. It seemed to us that this was a sensible way to go, particularly since we already had on this campus a broad array of academic efforts in the various health professions—medicine, dentistry, pharmacy, nursing, and public health.

We began to think about what kind of curriculum we should have. And suddenly everything crystallized and we had to move; one of the community programs that we had been instrumental in helping to plan suddenly was funded. Part of the program's plan was that a major portion of the medical care would be conducted by family nurse practitioners. So my colleagues on the faculty found themselves in the unwelcome position of having to plan a program, a curriculum, without all the time that one ideally wants for something like that.

I have taken the time to tell you this story because when we in academic situations think about the kinds of people who ought to be prepared for service and the nature of the learning opportunities that we might provide for them, it is important to remember that we should not do this in isolation. We are doing this to meet a need, and we are not going to understand this need unless we bring into the discussion—with full voting rights, may I say—the people who pay for and are to receive the service. One of the reasons that I believe our program is a good one is that we have had our feet firmly rooted in the soil and we have made it possible for people to see "What have you done for us lately?"

Pleased as I am that the two subjects to be concentrated on here are curriculum and clinical evaluation, I am a bit disappointed that there is no provision at this conference to discuss the emerging role of the family nurse practitioner on the American scene. I think that kind of discussion is needed in the open and it needs to be vigorous if not strident. With such new developments, policies are never decided on the basis of full, accurate, irrefutable evidence. Changes are made because they appear to make sense. New kinds of personnel, new frameworks for service have rarely been developed wholly within the academic situation. In fact, the very notion that you can train people in a specific way to carry out specifically delineated responsibilities, without all the trappings traditional to some of the professions, arose because of a demonstration in war time. The concept of group practice was not developed in an academic situation. Most changes in the patterns of care were not produced in the university: they were produced when people had to solve a problem and it was not possible to do so with the standard means and the traditional wisdom, so they did what seemed to make sense. When it worked, it became acceptable; when it didn't work, it was not acceptable. Thus, it is important to work with the public and with fellow workers in the field, to get their perceptions of what is needed and how it is working, because there is very little point, really, in talking about curriculum without a clear notion of what it is all for. The preparation for the future is only partially in our hands; most of the decisions are made by others. And I believe that is as it should be.

FIVE QUESTIONS FOR FAMILY NURSE PRACTITIONER EVALUATION

LAUREL ARCHER COPP, R.N., Ph.D.[1]
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I want to talk about how to evaluate the product of the FNP program or, "What to Do Until the Accreditors Come." In an article in *RN* I posed four questions of accountability that I thought I would want to ask myself if I were a beginning practitioner of a new role.[1] I have added one further question now. The questions seem as real today as they were when people began to expand the purview of their functions, their skills, their appreciations, and their collaboration with other members of the health team. I'm asking these questions to the product of the program and to all of us as planners and evaluators of programs. If I were looking at curricula I would expect to find some threads that begin to answer the questions and hopefully some tools that might also help.

As a family nurse practitioner facing the new role, the question I would ask myself would be these: *"May I?"* Not "May *I*" as we used to play that game when we were children, but "May I practice at all?" and certainly, "May I practice legally?" I think some of you have gone through this painfully in your States, and it has meant new definitions of primary care, and new definitions of "nurse practitioner." When we began we did not have Federal guidelines, and as a matter of fact, many read the Nurse Practice Act and the Medical Practice Act for the first time, and said, "Why didn't anyone ever tell us they were like this?" They were either too constraining, or too loose; they absolutely did not fit our needs, and many went to work to redefine the practice so as to accommodate in a better way the expanded role. In that connection I would like to recommend to you an excellent paper written by Audrey Booth, entitled "Legal Accommodation of the Family Nurse Practitioner Concept: The Process in North Carolina." This is a short and very succint paper. Perhaps the process it describes will be helpful to some of you who are learning the pitfalls. The paper not only points out the concerted efforts made by the respective professional communities that were going to be involved

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[1] Copp, Laurel A.: "How to Plan for an Expanded Nursing Role." *RN Magazine* 36:11, November 1973.

— The School of Medicine, The School of Nursing, The School of Public Health, and sometimes other schools as well — but also points out that there was a great deal of meeting, learning, educating, and interdisciplinary exchange fostered by a number of groups. When the groups did not have the kind of structure they needed in order to study and recommend change in both the Medical Practice Act and the Nurse Practice Act, they found that structure and went to work. Audrey Booth also brings out the personal contact, the climate that was necessary, and she talks a little about the political clout needed and the parallel political maneuverings that made possible whole forums and arenas in which we could talk about these things in new ways. So I would suggest that you look at this whole answer to "May I practice? May I practice legally?" Now, the evaluator may say, "How're you going to know when they're doing it?" I don't think the answer is merely to count the absence or presence of lawsuits, claims, and the like. But I do think knowing the law, observing the constraints until modified, and then working out a joint approach to the change of the law is one of the best learning experiences that professionals may have together. The answers to "May I" still differ from State to State. In some States the answer is still "No"; in some States the answer is "almost legally," and in other States we have some good role models, some good State laws.

The second question I would ask if I were a new practitioner looking in the mirror and getting rather introspective—and scared—would be, "*Can* I?" Can I really do it? Can I accomplish it? Am I able? If someone teaches me can I then demonstrate that I have the skills to do what is expected of me? The answer to "Can I?" comes deep in the curriculum and in demonstration of the learning skills. As you consider your FNP students, how are you going to make the phenomenon of time work for you? For example, what if some of your students can show the skills that you wish in 13 weeks but the course is only 12 weeks? Just a little longer, just a little more extra help, just a little more attention and maybe they could have made it. The whole question of "Can I" relates not only to the calendar, and to teaching techniques, but certainly also to evaluation techniques. Many of us in nursing have asked, "Do you need to make a bed three times or thirty-three?" Some of us knew it was 33, but we were in classes with people who needed to make it only 3. We also have wondered, "How do you measure whether or not the learner will perform when you're not looking?" Teaching is not telling; teaching is communicating and demonstrating effectiveness. Thus we stress observation skills, communication skills, and premeasures and postmeasures, asking always the questions, "Is the problem with the student, is the problem with the teacher, is the problem with the lesson, or is the problem the tools of evaluation?"

As if that isn't enough questions, we'll ask more. The problem is to develop valid and reliable tools that are also flexible enough to be changed as change is needed so that relevance remains. How do you know if I, the practitioner, have learned what I've been asked to learn? That certainly gets into the whole area of how much practice, how much followup, how many standards—and how reliable are the standards? Just identifying safe practice standards is a kind of assignment that most of us cope with every day, but always feel that we don't do very well. Then, of course, there is the curriculum that we develop, teach, in which we all are involved every day. How do you teach things you yourself don't know? Most of us try to do that presumptuously. How do you teach about pain when you yourself have not suffered? How do you teach about despair and hopelessness? How do you teach someone to handle grief? How do you recognize and treat anxiety? How do you bridge the gap between persons and cultures and beliefs and values, experiences that are completely foreign to you? Look at our curricula: we're trying to do all that because it represents the needs of the consumer.

If I'm legal and if I'm skilled, there's still a third question: "*Should I?*" I've always been interested in how popular expanded scope is at 3:00 a.m.—much more popular and acceptable than at 3:00 p.m. Thus we come into the whole area of appropriateness, and "Why me, Lord? Why was I called out of bed?" The FNP is saying, "Is it real, or is it just convenient? Is it real, or is it sloughing off the unpopular patient load? Is it real, or is it because I'm actually handling an abandoned patient?" The preceptor is saying, "Well, she's got to get into it sooner or later; she may as well show us if she'll sink or swim." Interesting philosophy, but most currently heard in the wee small hours. "Should I" relates to appropriateness and to setting limits. Should I? In a study that I did of 12 practice sites and 184 nurse practitioners I found that one thing they had to do right away was to assess where their own limits lay and to abide by inner nudges they had about getting in too deep, or inappropriately getting into cases they could not handle. They had to decide when to say "no," as a matter of fact. So FNPs are saying, "What are my skills and limitations as related to the patient's needs?" Conversely, the FNP often has to work her way into a situation where she has not been invited. Sometimes she *knows* that she can be therapeutic and she has to beg, borrow, and demonstrate that indeed she knows what to do for this patient if someone will just let her. If she feels she is being barred, she then has to demonstrate that she is the appropriate person, the right person, the skilled person.

There's another aspect to appropriateness that I'll touch on briefly. The FNP is very aware that she sometimes is the therapist of choice when the patient cannot pay, when the patient is not of the popular diagnosis, when the patient is not accessible geographically, and most certainly when the patient is a chronic complainer with many demands for health care. So the FNP sometimes has to say "Why me?" How does one know if she should be the choice? If her care is appropriate, I think she knows. She has a case load that seems appropriate to her because patients are referred to her and because she has back-up support. She is indeed involved with other members of the team and is not on her own completely, and she knows she is trying to assess appropriateness by the nature and numbers of demands made on her.

Another question the FNP asks or should ask but all too often doesn't ask is: "*Will* I?" "After they pick me out of my previous position, invest all of this time and money in me, then what will I do in response?" Some of us have seen with our own eyes what the answer to this is, and we are concerned, for all too often the FNP does not (because of the setting, because of the people in the setting, or because of lack of confidence) go out and do what she was prepared for. Very often she retreats to things, to nurses' stations, to charts, and is not demonstrating what we know she can do. We are aware of disappointing statistics that show that even after the investment of time and energy, and course work, and preceptorship, the FNP often does not go ahead and demonstrate real abilities. We must then in evaluation ask ourselves, is it a problem of the setting, is it a problem of self-confidence and self-image, is it a problem of preparation, is it a problem of social pressure, or is it a problem of self-concept and role concept? Who are colleagues? What support system is developed? I'm really saying that I don't know who's her worst enemy—physicians or other nurses. Other nurses are very, very troublesome as she tries to be a new person in a new setting. All of this has to be worked through. I grant you there are still handmaiden stereotypes she has to work through, there are man/woman relationships, and woman/woman relationships. It's not very comforting to her sometimes to hear a physician say, "But of course I get along with nurses, I'm married to one, am I not?" Perhaps therein lies the problem in perception. She wants to retort, "Fine, then yell at her, not at me. I'm not your wife." On the other hand it must be terribly maddening to the physician to have the FNP go all tearful and soggy. (I remember a physician saying to me, "For God's sake, can't you get her out of the linen closet? Must we play out yet another act of "As The World Turns?" He really considered it not playing by the rules, not standing up to the problem, and I had to agree with him.)

If the nurse does not have confidence enough in herself to play this role, how can she be involved in the healthy person-to-person realtionships that are so vital for the success of the role?

The same psychological ground rules that apply between persons also apply between health professionals, and I'd just like to remind us of a few. In the doctor/nurse relationship, each person should have a realistic concept of the other's personality, values, and goals. (I didn't say they had to love each other.) Secondly, we would hope that they would like each other—at least we would hope there would be more things about on another that they like than that they don't like. Third, each of the members of the team must feel concerned for the well-being and the growth of the other and act accordingly: it's a two-way street. Each communicates his feelings honestly and openly to the other with as little defensiveness and personalization as can be had. (I laugh about the story of the psychiatrist who said to the patient, "I find that my major problem with my patients is that every time I say something to them they always personalize." The patient said, "Oh I don't think I do.") Demands and expectations imposed must be feasible, mutually agreed upon, and consistent with the values inherent in the relationship. And finally, each must respect the right of the other to be self-determining. Even included in this is the eventual determination, perhaps, of the termination of the relationship.

The last question that I think we have to ask as we look in the mirror is, *"Will it make a difference?"* I'm not at this time adding that scary word "significant"—I am not asking, will it make a significant difference—but will it make *any* difference at all in the long run? Some of us have been looking at what evidence there is to show whether or not any tracks in the sands of time will be there to indicate that the nurse practitioner and the physician implemented this new role relationship. Without giving you footnotes and ibids I would like to say that I could show you studies that do demonstrate that it makes a difference. And how does it make a difference? It makes a difference in that there is more direct care given to patients, using the role; there is more nursing care given to patients, using this new role—including comfort measures and crisis intervention. With the new role relationship there is more recognition of the multiple problems that patients have. All too often as we're trying to put patients through protocols we forget that they don't have one problem, they have a multitude of problems, all of which are related to the other members of the family and the other problems that exist for them. With the new collaboration there is more recognition of the multiple problems that patients undergo. In one study there was improvement in the management of patients and what was more significant, there was improvement in the coordination of care. So these both do improve.

We can show that there is much more health teaching. The long-term significance of that is not yet known, but at least there are many more minutes of health teaching going on. There is less wait time for the patient in the waiting room. I wish we could say we were using the waiting room more creatively. We're having the patient wait X number of minutes to be seen for three or four or five minutes. They sell real estate in airports, but we do nothing in waiting rooms. The nurse makes crisp announcements at the door when she should be sitting on the davenport and talking and listening to the family about their health problems. We can see by research studies that there is a better and more satisfactory disposition of patients and their problems, in which the patient feels as though he was not only listened to, but the right thing was done in his case—whether it be referral, hospitalization, or transfer to another agency.

Using the new collaborative role, there is more time for patients and there is some improvement in patient satisfaction, so both quantity and quality are demonstrated to be better in the collaborative role. I hope as researchers we can demonstrate this to make a significant difference in the future. One thing I do not see: I do not often see the collaborative role used to do quality of care research. Whether it be assessment of the outcomes of care using new and different tools, whether it be assessment of the content of care, the assessment of the process by which the health care is delivered, assessment of better utilization of resources, or efficiency—in time and people and cost—the key people to look at these problems are the members of the health team in collaboration.

Lastly, I'd like to remind us that this is a people-to-people effort. I'm sure there is an easier way than the way we have been turning ourselves inside out to show that this concept can work. Hopefully the concept will be easier for people to use in the future: pioneers don't have much fun. There are more expedient ways, easier ways, but I don't think there are more effective ways. Most of all I think it's caring about the health care of recipients that has motivated us to take this approach. I think we're here because we care about people. We want to give the patient the kind of care that we can admit was associated with us and our effort and our names. I do worry that if we don't care and try hard enough, the opportunity, the privilege, or patient care may pass us by, and in the future there may not even be a track in the sand to show we cared.

That is my lead-in to telling a story. I said to myself once, "What will nursing, doctoring, patienting be like a hundred years from now?" (When I wrote this story, I thought I was talking about something that was going to happen a hundred years from now, then when it started happening 8 and 9 years from when I wrote it, it made me pause to think that we'd better use our privilege of caring for patients while we have it, because if we do not come up with an effective answer the privilege may be taken from our hands.) So, if you could project yourselves to a few years in the future—my story.[2]

Marla and Christy were in their first year of nursing school. One morning as they were coming from their clinical assignment, they walked along the corridor together. Marla had been assigned to the patient monitoring unit for the first time and she was so excited that she could hardly believe that the night shift had passed—4:00 a.m. to 7:00 a.m. Marla bubbled on and on. "Christy, you should have been with us last night. It was wonderful. Wait till you get transferred to the monitoring unit and you'll know what I mean. It was a great responsibility. You really have to be alert. I was assigned to only a few patients in our building, but when you get to be a graduate you have the unit all by yourself. All the patients in this complex, in the one across town, and a dozen or so astronauts assigned to our circuit. You know, I thought it would be different watching vital signs on *them*, but unless you know the code you really can't tell them from other patients on the machine. I mean, after all, the body temperature and pulse are the same on anyone. What's the difference if you monitor it from across the city or from outer space?

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[2] This material appeared in a slightly different version in Copp, Laurel A.: "Nursing 2069." *Nursing Forum* 8:1, 1969.

Although Christy listened politely, she was enveloped in her own thoughts. Finally, Marla noticed.

"What's the matter, Christy? Are you tired? Did you forget to regulate your blood pressure endocrine selector?"

"No, Marla, that's not it this time. I know I'm careless and I sometimes forget to watch my own reading, but that's not what it is this time."

"Well, let's hear it," Marla insisted. "You might just as well tell me before the supervisor beeps in. He'll know from your reading that there's something wrong and he'll check you on the intercom."

(You'll be happy to know that supervision is alive and well in the future.))

Christy sighed, almost with relief. "Marla, I had the strangest experience last night. It made me wish that I had read more microfilm and listened to more videotapes about how nursing used to be. I know we're all new at this sort of thing, but I wish we could know more about our ancestors. I mean, Marla, what did it used to be like when people were ill?"

Marla stopped and stared at Christy with complete attention.

"What is it, Christy?" she said. "Why are you so upset?"

"It's this," Christy said, pulling a strange-looking object out of her equipment pouch. The two girls inspected it inquisitively. It was about fourteen inches long and shaped somewhat like an inverted A. Plastic tubes ran down either side and were connected by a thin cross-piece; at the end of each of the plastic tubes was a small black bead-like thing. At the other end where the two tubes came together there was a disc, and the underside of the disc looked fragile.

"Whatever is it?" Marla gasped.

Christy let Marla hold it a while and then she said, "That's what I wondered, too, so I went to the library and I programmed every subject index I could think of. The instant writer gave me various printouts, but from one of the telephotos I think it's something they used in precomputer medicine called a stethoscope."

Marla said, "I understand the 'scope', but what's a stetho? I mean, I didn't learn that in our indoctrination."

"It's an instrument they used back in the twentieth century for diagnosis." Marla couldn't stand that answer, and she laughed so loud that the supervisor noticed her changed decibels, and, dialing her in on the transistor, warned her about professional behavior.

"Christy," Marla said in a voice that was somewhat quieter, but still disguised with laughter. "What do you connect it *to*?"

Christy went on to explain as much as she knew. "This end went into a person's ear. They called this person a physician. The other round end went on a person's chest.Physicians would shut their eyes and listen hard, and that's the way they tried to tell what was the matter inside."

Marla protested. "You mean that's all this person would do? He would just listen and then tell what he tought he heard?"

"That's correct insofar as I get it. In those days the nurses would help the physicians by preparing the patients, by writing down everything the physician said. Oh yes, I forgot. The physician would sometimes strike his fingers against the patient's chest or have the patient cough. That was supposed to tell something about illness, too."

"What a fraud. And what's a physician, anyway?" Marla said.

"Well, it's somebody they called a doctor. It's a person who studied medicine."

"You mean all this was before computer diagnostician units and therapeutic programming?"

Christy began to nod her head. "That's right. They had doctors instead."

Marla knew that Christy must have endocrine-imbalance. Or perhaps her oxygen tube was clogged. These ideas were weird. With a final effort she said, "Let's get this straight, Christy. You mean that the doctor was just an ordinary *man*?"

"That's what the data bank says."

"Now Christy, just a minute. We both know a man isn't smart enough. No man is."

Both girls were quiet for a long time. Finally Christy said, "Are you thinking what I'm thinking? It makes me wonder what the nurses used to be—and do."

"Yes," Marla answered. "I'm wondering if, when the doctor used this piece of equipment, he actually touched the patient. Wouldn't that be funny?"

"Yes," Christy said, and added thoughtfully, "I wonder what it used to be like when the nurse saw and talked to the patients she cared for."

NURSING PRESENT TENSE[1]

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It is very good to be here. The University of North Carolina and the Division of Nursing have enjoyed a continuous and productive colleagueship. It was nearly a decade ago that we initiated a 7-year training series to foster critical analysis of nursing service. In that project, public health nurses from all sections of the country learned the principles of epidemiology; and applied that knowledge to correct patient-care problems in their own agencies. As part of their training, they carried out numerous patient-care studies of scientific merit and practical consequence.

Through the study process, for example, they validated midwifery practice; quantified deficits in geriatric care; delineated and analyzed problems of children in orthopedic casts; and affirmed the efficacy of group teaching sessions to help mothers work out child-care problems. I might add that study projects growing out of this training program have been reported at national meetings and in the nursing literature.

In a cooperative effort of more recent date, this University and the Division of Nursing studied the role of the family nurse practitioner, which is the very concern that brings us here today. That national study will affect the work of every one of us here, not only because of the subject matter, but also because it is the excellent product of excellent nurse-physician collaboration. Conducted by faculty members Dr. Carolyn Williams, nurse-epidemiologist, and Dr. Michel Ibrahim, physician-epidemiologist, it has documented the impact of the family nurse practitioner on medically deprived populations.

This is a study that will have continuing value also for its implicit recognition that the urgencies for primary care nursing and for equal access to nursing skills cannot be considered separately and apart. Their inherent relationship is borne out by fact and engrained in logic. I shall be elaborating further on these related urgencies, for both have graduated into major national issues. It will take their early solution—

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[1] Presented by Mrs. Margaret Sheehan, Supervising Consultant Nurse, Division of Nursing, Bureau of Health Manpower, Health Resources Administration, Bethesda, Maryland 20014.

on a national scale—to move nursing into full command of the present tense.

Inexorably, you are part of this movement into the present. Your exchange here as educators for primary care—and the published proceedings of your deliberations—will illuminate the issues before us; and will bear witness that physician-nurse collaboration, an essential component of primary care nursing, is alive and flourishing.

It is heartening to note that training for primary care is indeed so patient-oriented that it relegates certain rituals of the health scene to the past, where they belong. Allow me to develop this point. Recently I read in the journal of the Boston University Medical Center about a primary care residency program for physicians. "Mrs. Morgan and her family," the piece relates, "are patients of the primary care center at Boston City Hospital's outpatient clinic . . . [where] interns . . . see their own patients on a continuing basis. . . . The doctor and nurse who together examined the [Morgan baby] and questioned [Mrs. Morgan] with little . . . regard for the . . . superior-subordinate relationships of doctor and nurse were, in fact, student and teacher. . . ." The doctor, we are given to understand, is the student; the teacher, a nurse practitioner and a member of the Center's primary care faculty.

This same instructive article can further remind us that although deficits in primary care add up to the number-one issue in health care delivery, geographic inequities in access to health care expertise run a close second. The Boston residency program, we are told, is producing physicians to deliver primary care "in the inner city, where the need . . . is grea[illegible]

What we must understand, then, is that preparation for primary care, and planning for the more equitable distribution of health care skills are parallel lanes for inducing health progress. We as a Nation can no longer accept the fact that large segments of our population are bereft of health care opportunity, and that their condition is rooted in economic reasons, or geographic location, or crippling deficits in primary care skills. As Americans, we must reset our conceptual time-clock to strike for *fair access together with quality* in health care delivery.

Your attendance here bodes well for more equal health opportunity. As educators of family nurse practitioners, this is your time to take stock of your training resources, styles, and results; to consider as well how many nurses you can imbue with the primary care ideal, for the reason that nationwide quality in health service has a very practical dependence on the quantity factor. If it should ever come to pass that we have a sufficiently large pool of family nurse practitioners, we shall not only achieve a higher level of family care, but indeed care to families irrespective of their situation or location.

By participating in this conference, you are promoting the well-being of the health care consumer who now regards good health as a right that should be guaranteed; demonstrating collaboration between nursing and medicine; and apprising the Congress of how deeply you share its commitment to nursing at practitioner level.

This past July 29, as you know, the Congress enacted the Nurse Training Act of 1975. With certain modifications, this law extends our earlier nursing authorities. Of its nine provisions, several—including two that are totally new—stress education for leadership in nursing education and practice.

There is the new authority for the support of advanced training to prepare nurses for teaching, administering and supervising nursing service, or contributing as clinical specialists. This provision bears similarity to—indeed has an element of overlap with—the renewed professional nurse traineeship program. The overlap is valid, because although the total number of nurses has increased over the last 25 years, the proportion with education beyond the minimum level for nursing practice has actually declined. The intent of the advanced training provisions is to provide the rank and file of nurses with leaders to delineate the nature, and uphold the quality, of preventive and crisis care.

The second new authority in the Nurse Training Act of 1975 bears directly on the professional concern that brings you here—nurse practitioner training. It supports both grants and contracts for developing, operating, significantly expanding, or maintaining practitioner training opportunities. It calls attention to the needs of geriatric and nursing home patients. It points as well to primary care requirements in other types of health care institutions; in ambulatory care settings; and in the home, which is the proving ground of the family nurse practitioner.

I have mentioned that the bill containing these new provisions was passed at the end of July 1975. As the administering agency, by mid-October my Division had distributed nationwide an 11-page series of fact sheets describing all its support programs and the sums authorized for their implementation.

"Authorization," of course, is a word that has to give us pause. It indicates what sums the Congress felt might be needed to put the law into operation. It does not dictate the actual sums that—in the course of events—will be appropriated for that purpose. As the authorizations are not assurances, they cannot answer our questions. Will we, for example, have sufficient funds this fiscal year to support additional grants and contracts to improve nurse training? or will the appropriation suffice only to continue ongoing projects? May it be necessary to cut traineeship grants across the board? How much will the public purse allow for aid to schools in financial distress? Although such questions are our constant companions, we must nevertheless program to carry out the will of Congress. In short, the work of preparing program guidelines, regulations, descriptive documents, and application forms continues apace.

Thus, we have been very much preoccupied with the development of guidelines for nurse practitioner training. For our own guidance, we have the law itself, which specifies that practitioner training should be designed for groups of at least eight nurses; should span at least one academic year; and should combine classroom instruction with supervised clinical practice. Working from this starting point, we have held meetings to solicit the interpretive thinking of leaders in national medical, nursing, hospital, and educational organizations. We have also met with medical and nursing personnel who have demonstrated their expertise in nurse practitioner education. It is thus through the route of educated dialog that suggestions for training guidelines surface and take form.

In the Federal system of checks and balances, the Office of the Secretary of HEW puts close scrutiny on the guidelines we propose. When accepted, they are sent for publication in the Federal Register. Then further dialog—this time from the concerned public—may ensue, and may occasion revisions in our draft document. But once guidelines do take final shape, they are not subject to change; instead they become part of established Federal regulation.

Please be assured that the moment guidelines for the conduct of nurse practitioner training have been approved in every detail, we shall speed them into your hands. We need your continued support to make primary care nursing a more stable aspect of the American environment.

As educators for nursing, you will want to know that certain other provisions of our new legislation also call for the expansion of nursing capabilities. The renewed provision for special project grant assistance authorizes activities to improve the distribution, by geographic area, or by specialty group, of adequately trained nursing personnel. We may take this as congressional recognition that good nursing care and the fair distribution of nursing skills cannot be separated as aims. In purpose, they are indivisible.

Then there is the renewed construction authority, which specifies that building plans providing for the expansion of graduate training be given special consideration. As for a school's eligibility to receive a capitation (or basic support) grant, this may possibly depend on commitment to primary care. A school has the choice of either increasing its first-year enrollment, or conducting at least two types of training activities from a prescribed list of four. Primary care training, which is your concern, heads the list.

So thoroughly has the concept of primary care impinged itself on the national consciousness that the Bureau of Health Manpower—of which the Division of Nursing is a part—recently defined primary care for the entire family of health disciplines. The Bureau's definition puts strong emphasis on patient teaching, strategies for preventing health crisis, and client participation. Let me read from it: ". . . primary health care includes services for the promotion and maintenance of health; prevention of disability; basic care during acute and chronic phases of illness; guidance and counseling of individuals and families; and referral to other health resources. . . . [It] provides a timely access to entry into the health care system and may be initiated and mobilized by the client and/or provider . . . in a variety of settings . . . although a large number of providers [may be] involved . . . a single or small team of providers must be responsible for the . . . coordination and management of all aspects of basic health services. . . ."

As I mentioned, this statement has application to the various health disciplines, nursing and medicine included. Interestingly, it has similarity to a definition of primary care medicine as proferred by the Coordinating Council on Medical Education. About a year ago, the Council defined the primary care physician as "one who establishes a relationship with an individual or a family for which he provides continuing surveillance of their health care needs"; also "comprehensive care for the acute and chronic disorders which he is qualified to care for"; and, in addition, "access to the health care delivery system for those disorders requiring the services of other specialists. . . ."

I also find it interesting that the Coordinating Council on Medical Education has gone a step beyond definition to issue three very timely recommendations: (1) that schools of medicine motivate students toward the teaching and practice of primary care; (2) that graduate education institutions establish residencies oriented toward primary care; and (3) that training programs in primary care medicine motivate their trainees to collaborate with other members of the health care team.

The latter recommendation in particular should appeal to us here, because we have actually put its preaching into practice. The winds of change are blowing that way. You will recall that a little earlier I made reference to teamwork as it is influencing physician training in Boston. Let me now add an example of professional collaboration in support of nursing.

A year or so ago, the health authorities in a midwestern State initiated a nursing demonstration for geriatric patients. To take this step, it assigned a gerontological clinical specialist, i.e., a geriatric practitioner, to a 200-bed nursing home. It was found, in this research and demonstration project, that when newly admitted residents were accorded nurse practitioner treatment, they either maintained ability to function in daily self-care, or made functional gains. But among newly admitted residents who received a more routine type of nursing home care, a number unfortunately lost function.

These are bare facts—too bare, as I have stated them—to depict the professional outreach of the qualified nurse practitioner. If you will allow me then, I will tell you that the geriatric practitioner in this nursing home project also worked with some of the long-term residents. One was a hemiplegic who cried each time he tried to talk. In addition to suffering a stroke, he had also fallen and fractured a hip. Although a year had passed, as yet he was walking only in the parallel bars. To the practitioner he confided that he wanted to talk without crying; and he wanted to walk.

Working with the other members of the health care team, this expert in geriatric nursing was able to effect a change in medication—and the crying stopped. She recommended a change of cane as well, and the patient began to walk with only minimal assistance. Having increased his ability to ambulate, he began to show interest in dressing himself. These results would not have been possible without a setting that assures interprofessional consideration and acceptance of the nurse practitioner role.

As the record shows, role delineation in primary care has continued as a Division of Nursing concern for nearly two decades. It was in the late 1950's that we began supporting a demonstration of nursing assessment in the student health clinic at Yale University. The project data affirmed that for assessment purposes, a nurse's interview with a student could quite safely replace a physician's examination.

Among our many subsequent activities in role delineation and evaluation, about a decade ago we helped to assess pediatric training offered at the University of Colorado. We learned (1) that graduates of this practitioner program independently handled 75 percent of the pediatric clientele at a Denver health station; (2) that graduates working in the offices of pediatricians were sought out by parents of the young patients for counseling; and (3) that still others—despite cultural and language barriers—took decisive care of pediatric emergencies within a poor, isolated, minority group.

Also in the interest of role expansion, for a number of years the Division has been working toward models of primary care practice in school nursing. Drawing on our intramural study of illness and absence from school, the University of Delaware is currently devising models to meet the requirements of students in urban, suburban, and rural locations; and in Tacoma, Washington, the Public School System is developing a model of nursing practice for inner-city students.

For some time we have been funding research to prepare nursing personnel for the prevention and treatment of decubitus ulcers. We are currently funding a study to find out what strategies the nurse can use—other than drug administration—to induce relief from pain. We are the sponsors of a project that encompasses the first known attempt to measure the effect of environmental factors—mother-infant relationships, for example—on childhood progress. Project staff are presently devising tools to help clinic nurses identify, evaluate, and treat problems of childhood health and development.

We are also supporting two programs of training for primary care and research in burn therapy: one is being offered by the University of Texas Southwestern Medical School in cooperation with Texas Woman's University; the other, by the University of Cincinnati. And in Denver—at the Medical Care and Research Foundation—we are examining the components and impact of primary care nursing for people of advanced age.

To touch for a moment on the specific field of community health, it appears that training sponsored at the University of Texas School of Public Health has resulted in a community nurse practitioner of a new stamp. Products of this course of study are nurses who are additionally community assessors, community thinkers and leaders. They are addressing health problems that are community based, and thus of essential detriment to entire segments of the population. These nurses, we understand, have joined with citizen groups to correct gaps in immunization, deficiencies in nutrition and sanitation, and problems of teenage drug abuse. Their practitioner training—their advanced nursing education—has fitted them for a new kind of nursing service and community command.

As you have no doubt gathered, these past several years we have put highest priority on training for primary care nursing. In addition to supporting research and demonstration projects, we have negotiated fully 47 training contracts with educational institutions. By 1978, an estimated 3,000 nurses will have been prepared for primary care contribution in such areas as nurse-midwifery and medical nursing; family, maternal, and rural health; and the fields of pediatrics and geriatrics.

A number of our more recent contractual agreements have importance for improving nursing distribution as well as nursing practice. Six institutions, for example, are preparing geriatric nurse practitioners particularly for service in medically disadvantaged locations. These programs are ongoing at Rush-Presbyterian-St. Luke's Medical Center and in five universities. They are combining didactic instruction with clinical experience in the care of elderly people; also of chronically ill adults of lesser age.

A total of nine training agreements, also of somewhat recent date, are for improving the primary care skills of nursing faculty at baccalaureate and higher level. Through these contracts we are helping to ensure that some 300 primary care faculty will themselves have the skills they propose to teach. As all the participating institutions subscribe to the tenet that nursing education must be evaluated in terms of its impact on nursing service, all are expecting their faculty-member trainees to combine teaching with clinical care on a continuing basis. Surely, the tighter the bond nursing can forge between education and service, the sooner patients in greater number can aspire to nursing of merit.

You will be interested in hearing, I think, how some of our practitioner graduates are reaching out to utilize their skills in patient settings. We have learned that a graduate of a family practitioner program on the Pacific coast had been working in a logging community, and has also contributed to clinic services for Indian Americans. (Here again, we see that commitment to primary care means commitment as well to the more equitable distribution of nursing expertise.) Another family practitioner graduate is working in a methodone clinic. Products of a maternal nurse associate program, we understand, are being hired to work in the offices of their physician preceptors. Men participants in that same study opportunity are counseling husbands to ensure the success of family planning. Another male member of the student group is committed to reducing infant mortality in his native Nigeria. Pediatric nurse practitioner graduates are ministering to children of migrant families.

And yet—thousands upon thousands of people, particularly in rural areas and the inner cities—remain without fair access to health protection. In this sense, we are far from being a practical democracy. But at least the national conscience is now perturbed about the plight of the medically disadvantaged.

Last year the National Health Service Corps assigned some 600 physicians, dentists, nurses, and other health professionals to underserved communities in 42 States. About 85 percent are situated in rural areas having fewer than one primary care physician for every 4,000 people. Corps personnel emphasize the teaching aspect of health care, and comfortable interrelationships between health care providers and consumers. They join with citizen groups and community agencies to help migrant families, and to staff emergency and preventive services. Certainly Corps nurses have made notable demonstration of "operation outreach." A nurse practitioner assigned to a southwestern community made it her business to seek out and treat elderly people who never before—not in a lifetime of 70 years—had enjoyed the services of a health professional.

Similarly in concern for the underserved, the American Medical Student Association is using Federal funds in a project to improve health conditions among Indian Americans. This past summer, some 30 or more students of medicine, pharmacy, nursing, and other health fields took externship training in Indian communities, and will be repeating this experience in the summer to come. We understand that representatives of the Indian groups have a voice in setting training emphases. And so, as we see, the primary care concept of patient participation—the recognition of patients' potential for self-care—is attaining reality.

Another project, the Project IODINE of the Southern Regional Education Board (SREB), has furnished convincing proof of health care potential among disadvantaged people. IODINE is the provocative acronym for the long project title, "To Increase Opportunities for Students from Disadvantaged Environments to Enter and Be Graduated from College-Sponsored Schools of Nursing in the South." Three invaluable publications have come out of the IODINE activity. There in print is evidence that disadvantaged nursing students who received counseling, financial aid, and tutoring performed comparably with others from their schools on their State Boards. And there, forcefully spelled out, is the educational principle that faculty must learn as well as teach; indeed, must learn *in order* to teach. As part of the project, nursing faculty in the SREB area learned to revise their teaching strategies to suit the untraditional nursing student; learned, in short, how to counteract the pall of educational deficit.

We need more projects of this kind to broaden our base of recruitment for nursing practice, because all people need nursing; and by this token, nursing needs the life experience of all who can contribute to the health of our society. Just as we cannot have a free country unless all are free, so we cannot have a healthy country if some people are short-changed on health opportunity, and are denied a fair chance for health contribution.

Also by the same token, it seems to me that practitioner training centers should take pains to recruit trainees who have known the lot of disadvantage. They—not the more protected members of our society—have a "head start" in defying the web of poverty, disease, and disability. Their life experience, and their professional education—particularly when broadened by practitioner training—can mean nursing present tense for untold numbers of "have nots." They can undo the irony of too little and too late in health care for the very populations that need it most. What are the areas of particularly sharp medical disadvantage? Rural zones and the inner cities. Where do we find the severest dearth of primary care nursing? Exactly in such locations.

Surely the time must come when we will look back on the poor distribution of nursing skills in disbelief that we allowed it to persist for so long, and with such damaging consequences. I cannot predict how soon that time will come, but I can tell you about a Division-sponsored national project to reduce geographic inequities in nursing numbers and types of nursing skills. Last March we awarded a contract for this purpose to the Western Interstate Commission for Higher Education—the regional compact known as WICHE. The project rationale is that accurate geographic projections of nursing manpower requirements are indispensable to planning for fairness in nursing distribution.

WICHE, although a regional compact of 13 Western States, is committed to the proposition that nursing manpower is a *national* resource, and thus has the obligation to attain its highest potential for *national* effectiveness. The project calls for WICHE to identify the kinds of data which are essential for reliable projections of nursing manpower requirements, and to work directly with States and regions to develop and implement suitable projection methods. It entails as well two national conferences.

The first conference of some 250 participants took place last fall in Denver, Colorado. The conferees comprised representatives of Federal and State agencies; Cabinet Departments; State and national nursing and hospital associations; educational foundations; and consultants in the fields of research and management.

The agenda provided for concurrent seminars devoted to such considerations as data bases, national concerns in health care development, and innovations in inventory methods. Forum discussions at this national gathering explored such problem areas as the measurement of nursing manpower needs, methods for judging the productivity of nursing service personnel, and approaches for the assessment of nursing distribution. With this kind of orientation, the conferees began their work of developing planning procedures and considering methods for the projection of geographic requirements for nursing. This coming summer, the same group of conferees will meet for presentation of the project results, conclusions, and recommendations.

Thus you see that nursing at the Federal level, and educational institutions, and health-concerned entities countrywide, and our legislators are working together to advance primary care; and to accord all Americans a fair and equitable share of health protection. We have a hard row to hoe, but the heartening fact is that we are understanding and we are capable of addressing the separate and compounded urgencies for primary care and equitable distribution. We are working to translate the conceptual idealism they share into trends of visible import and undeniable impact. Surely we know that these trends—accelerated by collaboration within nursing itself and among nursing and the other health professions—will change all our lives. These are the trends that will make health care of quality and dispatch a staple of our national environment.

THE ROLE OF THE FAMILY NURSE PRACTITIONER: IMPLICATIONS FOR CURRICULUM

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It is now 10 years since we first began to hear about that new breed of nurse, the nurse practitioner, and I have been intimately involved with the movement for 7 of those 10 years. Therefore, when I was asked to present a paper on "The Role of the Family Nurse Practitioner: Implications for Curriculum," it did not seem a very formidable task—especially since the date was 5 months off and acceptance would gain me admission to this conference. Besides, writing would force me to learn more and clarify my own ideas on this subject. So I accepted! I should have known—learning learns but one lesson: Doubt! I must note at the outset that this paper will have few answers and many questions. Perhaps the questions will be useful in stimulating discussion as we work toward the establishment of standards for the education of family nurse practitioners.

To help me in preparing, Julia Watkins sent me copies of each participating program's description of the FNP role, and analyses of the questionnaire responses from all the programs. There was other material to help too: published descriptions by practicing nurse practitioners and data from several research studies. In reviewing these materials, I felt that the issues related to role and curriculum could be discussed under the headings of Task, Teacher, Trainee, Topic, Time and Test. For this paper these six T's will be an organizing framework and I will start with Task.

Task

There was almost unanimous agreement in your program descriptions that the task was to prepare nurse practitioners to deliver primary care. Some, but not all of you, defined primary care. Here are two such definitions, one which was suggested by the planning group as a preliminary operational definition for this conference, and one which I developed last year after review of a large number of such definitions. The first reads as follows: "Primary care is what most people use most of the time for most of their health problems. Primary care is majority care. It describes a range of services adequate for meeting the great majority of daily personal needs. This majority care includes the need for preventive health maintenance and for evaluation and management, on a continuing basis, of general discomfort, early complaints, symptoms, problems, and chronic intractable aspects of disease *(1)*."[1] A nice commonsensical and fairly realistic definition.

The second definition is more idealistic and speaks more precisely to what many people think primary care *should* be. It reads: "Primary care is a type of health care delivery which emphasizes first-contact care and assumes an ongoing responsibility for the patient for both health maintenance and therapy for illness. It includes services for the promotion of health, prevention of illness, guidance and counseling of individuals and families and referral to other health providers and community services. Concern for the physical, emotional, social, and economic status of clients and their families in relation to their cultural and educational backgrounds and a pattern of continued interaction between client and care provider are important aspects of primary care *(2)*."

One could argue, perhaps, that all of the second definition is implicit in the first, or that the scope of practice implied in the second definition is too broad and therefore impractical. The principal difference is in the relative emphasis in the second definition on continuity of care and psychosocial care and on the family and community.

These definitions of primary care can serve as a general definition of the FNP role. More specific information about the role can be obtained from the literature. The *Feedback Report No. 1* of the North Carolina Family Nurse Practitioner Program deals with selected activities reported by 52 North Carolina Family Nurse Practitioners *(3, table 1)*. Note particularly that 67 percent were teaching other personnel and 54 percent were teaching students. It is also of note that 40 percent were working with community organizations and 27 percent were teaching patient groups. We will return to these data in the subsequent discussion.

I attempted an item analysis of the role descriptions sent in by each program, knowing full well the limitations of such prose but believing that the most strongly held ideas would be stated. I also analyzed role descriptions of four practicing nurse practitioners, three reported in the literature *(4, 5, 6, 7)* and one from a project proposal, using the same analytic system that I had used for the program descriptions. One of the nurses spoke to continuity of care, three saw themselves as

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[1] Numbers in parentheses refer to literature cited, page 35.

Table 1.—Selected FNP activities by type of setting

	FNPs by type of setting									
	Community health center		Institutional settings[1]		Private solo/group practice		Public health department		All FNPs	
FNP activities in setting	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
Direct patient care	29	100	11	100	8	100	4	100	52	100
"On-call"	23	79	—	—	2	25	—	—	25	48
Teaching other personnel	22	76	5	45	5	63	3	75	35	67
Home visits	20	69	4	36	6	75	3	75	33	63
Teaching students	18	62	4	36	2	25	4	100	28	54
Working with community organizations	13	45	3	27	2	25	3	75	21	40
Teaching patient groups	9	31	1	9	38	3	25	1	14	27
Nursing home visits	8	28	1	9	5	63	1	25	15	29
Hospital visits	7	24	3	27	4	50	—	—	14	27
School visits	4	14	2	18	1	13	3	75	10	19
Emergency room visits	2	7	2	18	3	38	—	—	7	13
Total, fall 1974, (N=52)	29		11		8		4		52	

[1] Includes Child Development Center, Institution for Mentally Retarded, Hospital OPD/ER, Employee Health Service, Student Health Service.

heavily focused on families, and one reported extensive involvement in community health and development. All four saw preventive care and the management of chronically ill patients as important parts of their jobs.

How do the program descriptions fit with these role definitions? Twelve out of the 18 descriptions indicated a concern for families, nine mentioned community, and only five saw continuity as an important aspect of primary care. Usually community was mentioned in terms of awareness and referral to community agencies, though several programs saw the FNP as one who should assist the community in identifying and planning for the resolution of health problems and needs. The lack of emphasis on continuity of care is interesting in view of all that has been published concerning fragmentation of care and lack of continuity. Is it thought not to be important, or is it assumed as an integral part of primary care for which no teaching is required? Are the conditions of training family nurse practitioners such that continuity is difficult to build into the program and, since it is not provided for in training, it is not emphasized in the role definition? My personal bias is that it is important for all FNP students to have experience in caring for at least a small cadre of patients over a prolonged period so that a sense of personal commitment to the client is fostered and so that the student is able to observe health and developmental change over time.

The difference between the two definitions of primary care may speak also to a philosophical issue in curriculum development. Is the primary *raison d'etre* of the nurse practitioner to increase the availability of primary care as described in the first definition, or is it to improve the quality of care by providing services not usually included in the traditional models of either clinic or office medical practice; or is it both? Although the purpose of this conference is to begin to establish standards for training FNPs, I submit that at least some consideration must be given to this very basic question. It is relevant to issues of Teacher, Topic, and Time, to say nothing of Territory, a seventh "T." Territory in terms of professional territory (whose job is it to do what?) and in terms of the work setting. Only four of eighteen programs reviewed specified that they were preparing nurses for practice in medically underserved areas. Studies at the University of Connecticut and at the University of North Carolina at Chapel Hill have shown that the scope and emphasis of care-taking activities are determined in large part by the setting and may be quite different for a nurse practitioner in a rural clinic and for one working in a group medical practice, or in a medical center clinic. Do these nurses need to know different things, or is there a common core of knowledge which will serve the needs of both? Keep this question in mind and we will return to it when we deal with Topic.

Teacher

The question of who should teach what to nurse practitioners is still a viable one. In the early days of the practitioner movement the physician was the primary teacher—not surprising since the first programs developed under the aegis of medicine and focused primarily on teaching the skills of history-taking and physical diagnosis together with medical management of common illnesses. Some factors which have tended toward increasing nursing responsibility for practitioner training are:

- the development of a cadre of nurses who are educationally prepared to teach and who have been prepared as nurse practitioners;
- the high cost of physician time, and in some instances the difficulty in recruiting suitable physician teachers even if money is available;
- the transfer of many established programs to schools of nursing and the development of new programs within nursing schools which earlier rejected the concept (this movement has been accelerated by funding agencies: in time even the most traditional nursing faculties capitulate to the power of Mammon);
- the territorial imperative of nursing, our need to control our own house and fear of being co-opted by medicine;
- the conviction on the part of many nurse practitioners that their role is, or should be, as much an expansion of their nursing knowledge as of their medical knowledge.

Should physicians be involved in teaching nurses? What are the pros and cons? First, let me say that the urgent need for nursing faculty prepared at the master's level and qualified to teach in these programs is well recognized. I also would point out that neither a master's degree in nursing nor a doctorate in medicine is guaranteed to confer pedagogical skills. If I have to choose, I will choose sound knowledge of content over knowledge of teaching methods. Given that, I see the pros and cons something like this.

As regards nurse-teachers—I believe that nurses can best assess the previous knowledge of nurse practitioner students and hence their learning needs. Nursing faculty, who are themselves practitioners, are often more effective role models than physicians and are also more likely to reinforce the nursing component of the role. They are often better prepared than physicians to teach content about human development and family and community and sometimes may be equally effective in teaching much of the rest of the curriculum. There are some cons, however. The one that concerns me most is the fact that few schools of nursing make it possible for nursing faculty members to practice. Until there is third party payment for nursing, schools can hardly afford to support faculty practice, nor can the nurse well afford it on her own. This means that the nurse-teacher may be teaching without the benefit of concurrent practice and indeed on a very weak base of previous practice. (I mean weak base of *any* previous practice. The issue is bigger than the NP movement.) When this happens, teaching lacks depth and vitality and even as a clinical preceptor the nurse-teacher has less credibility.

As for physician-teachers, their greater depth of medical knowledge is unquestioned. This, and their ability to talk in terms of everyday practice are prime advantages. The advantages go beyond that, however, and accrue to both professions, for in the teaching-learning process each learns to know and understand the other. Not only is informal communication facilitated, but formal nurse-doctor communication can also be improved. A good physician-preceptor can insist that his practitioner students tighten up their case presentations and present succinctly, using medical terminology. The nurse practitioner must sound like a physician if she wants to be heard by one. Having achieved that, she may be able to gain acceptance of her nursing concerns.

The disadvantages of the physician-teacher, apart from expense, are frequently related to lack of continuity of teaching with consequent lack of a sense of the level of understanding of the class. Each program has to resolve the question of whether it is better to opt for continuity of teaching or for greatest expertise in a given clinical speciality. The decision may in the end be a pragmatic one, but the question should be considered. There may also be problems in teaching method. Physicians tend to rely heavily on lectures, since that is usually the way they were taught themselves. Nurses too often respond to this passively as recipients of the Word instead of actively seeking to relate new facts to their existing knowledge. They may hesitate to ask questions for fear of seeming stupid, and it takes considerable teaching skill to lead them into a discussion. This passive attitude is furthered when there is a tight schedule of classes and clinical practice and students have additional home responsibilities so that preparation for class may be negligible. Should preparation be expected? How much? How do you handle bibliography and reading assignments?

My personal belief is that both physicians and nurses should be involved in teaching nurse practitioners *and* also involved in teaching medical students and house officers. The teacher-student relationship builds peculiar bonds that go beyond the relatively brief period of training, and I think it is important for nurses and doctors to be bonded in this way in order to develop understanding and respect for each other's professional competencies. As long as nursing handles its own job competently we need not fear being taken over by medicine, and in time we can gain acceptance as professionals from whom physicians can learn.

I have been talking mostly in terms of didactic teaching, but what I have said applies equally to clinical supervision. I think one of the weakest points, at least in our program, has been nursing supervision of clinical practice, especially during the preceptorship phase. The problem of selecting preceptors, orienting them to the goals of the program, and assuring students of both appropriate experience and supervision is one which requires a great deal more thought. How should it be done? By whom? Who should screen preceptors? If the nurse is paid by her physician preceptor during the training period, does that interfere with program expectations? Would it be better to lengthen the didactic phase to 9 months and shorten the preceptorship phase? That is a question of time; defer it.

Trainee

Table 2 was developed by Harry Sultz as part of the Buffalo study of nurse practitioners *(8)*. It details selected characteristics of nurse practitioner students. You will note that 22 percent of the certificate students were 45 years or older as compared to only 4.6 percent of the master's students; they, of course, also had more years of experience. In terms of prior nursing preparation, almost all of the master's program students had baccalaureate degrees (not always in nursing), but less than half of the certificate students did, although some of the certificate programs participating in this study required the baccalaureate. How do these data relate to curriculum? First let us think about the age distribution and what they may mean. I wish that we also had the data on marital status and number and ages of children. I think that the personal demands on a mother with children at home are quite different from those of a single woman without children. If the woman is a single parent, the demands are even greater, but the motivation may also be greater. I do not know whether there are yet any data relating success as a nurse practitioner to these factors, but it would be interesting to know. However, let us take age alone. The older nurse will have had a very different sort of preparation in her basic training; she may be naive as far as objective tests are concerned, and she may have more difficulty in assuming the student role. None of these are insuperable difficulties, but should we have some programmed learning modules of basic science material and pretests which are prerequisites to admission? These could help us to assess the knowledge level of the students and help them to get back into the swing of learning.

Baccalaureate students, especially younger ones, may also differ considerably from nondegree nurses in their knowledge of the behavioral sciences and in their perceptions of the nursing role and the appropriate relationship of nurses and physicians. These differences can work in favor of group learning, if they are used skillfully—the life

Table 2.—Selected characteristics of NP students

	Certificate		Master's		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Age in years						
Under 25	29	4.2	4	1.5	33	3.5
25-34	340	49.6	164	62.6	504	53.2
35-44	166	24.2	82	31.3	248	26.1
45-54	121	17.6	11	4.2	132	13.9
55 and over	30	4.4	1	0.4	31	3.3
Total	686	100.0	262	100.0	948	100.0
Mean age	36.2		32.7			
Sex						
Male	14	2.1	7	2.5	21	2.2
Female	668	97.9	275	97.5	943	97.8
Total	682	100.0	282	100.0	964	100.0
Race						
White	596	88.4	262	93.6	858	89.9
Black	57	8.4	10	3.6	67	7.0
Other	22	3.2	8	2.8	30	3.1
Total	675	100.0	280	100.0	955	100.0
Years in professional nursing						
None	23	3.1	4	1.4	27	2.6
1-5	226	30.1	152	51.5	378	36.2
6-10	213	28.4	68	23.1	281	26.9
11-15	112	14.9	47	15.9	159	15.2
16-20	91	12.2	18	6.1	109	10.4
21 and more	85	11.3	6	2.0	91	8.7
Total	750	100.0	295	100.0	1,045	100.0
Mean year	10.3		7.0			
Prior nursing preparation						
Hospital diploma	364	48.0	11	3.7	375	35.6
Associate	59	7.8	2	0.7	61	5.8
Baccalaureate	282	37.1	275	93.6	557	52.9
Master's	54	7.1	6	2.0	60	5.7
Total	759	100.0	294	100.0	1,053	100.0

experience of the older nurse serving as a foil for discussion of theory from the behavioral sciences and as a source of case material for role problems. Our trainees of the future will be different—I am sure of that, but I am less sure of how they will differ. It would seem likely that if we continue to admit nondegree students, we will begin to run out of diploma graduates and get increasing applications from associate degree nurses. How will this change our curricula? If, in fact, a significant part of the FNP role involves teaching other nurses and students and leading patient groups, is the associate degree nurse ready for that? Also, the baccalaureate programs are beginning to teach physical assessment, including history-taking and the full physical examination. As nurses leave off their caps, they add a stethoscope around their neck as a badge of office and some of them, at least, seem to know what they are hearing when they use it. Are we adapting to our changing students? Is the whole family nurse practitioner certificate program an interim thing which will not be needed if basic nursing programs pick up the ball? I doubt that they can, given the constraints of time in the undergraduate programs; but these changes, as well as changes in medical/nursing practice, will have to be constantly monitored, and the curriculum of FNP programs modified, if teaching is to be relevant to the needs of students and their patients. As you set up standards, it is vital that review of the standards be built in.

Topic

In considering the topics which should be covered in an FNP course, one is confronted with several very difficult questions: (1) What should be the bases for decisions about content? (2) In what depth should each topic be covered? (3) How much time should be spent on rare but life-threatening conditions? (4) What should be done about topics that are not covered in class?

One obvious guide to decision-making about topics is the set of program objectives. If they are clearly thought out, they can become a valuable tool in curriculum development, and the discipline of writing them can clarify your thinking. Sometimes in curriculum planning, objective writing is a back and forth proposition. When you start out, writing objectives may seem to be irrelevant; you know what you want to teach. In that case, you probably have some sort of objective formulated in your head. Very good! Go ahead then and outline your curriculum first, and afterwards write the objective. Then go back and see how well the two jibe. You may well find yourself redrafting the cirriculum in order to resolve the discrepancies. When the whole thing is done, objectives stated, curriculum lined up complete with lectures, seminars and clinical experiences, it is useful to go back to the objectives and for each objective identify the knowledge, attitude and/or skill needed to achieve it. Then check the curriculum to see where you think that information, skill or attitude will be taught. Attitudes are caught more than taught. You have to look at the way you teach, the way you talk about patient problems, and the way you relate to students when you are trying to instill attitudes.

The program objectives help, but they do not solve the topic problem. For example, an objective might state that the nurse will be able to diagnose and treat common minor health problems and manage common chronic illness. What is common? Obviously, that depends on where you are and what sort of population you are dealing with. A statistical review of cases seen in ambulatory care in your area can be useful in determining your curriculum and can provide validation for your decisions.

What about relatively rare but life-threatening illnesses? Do you spend as much time with them as you do with common illness? Probably not. Since such conditions are almost always managed by the physician, knowledge must be at the level of recognition of the serious nature of the condition rather than at the management level. Analysis of your questionnaire responses showed disagreement concerning teaching about rare conditions, but a review of the distribution of responses shows that the disagreement is frequently between a response of (3)—should be able to recognize but manage only in consultation with a physician and (2)—superficial knowledge, would always refer to a physician.

Another issue that has concerned many of us as we have struggled with planning practitioner programs is the lack of understanding by most practitioner students of the principles of physiology and pathophysiology. Almost all nurses have had some sort of course content in this field, but many, if not most, have a very fuzzy and imprecise grasp of it. The constraints of time in a certificate program, and the frequent lack of continuity of teachers make this lack difficult to remedy within the program. Could we identify appropriate programmed learning materials for the use of candidates for these programs, and require completion of programmed material and a pretest before admission, or if not before admission, before each related unit?

Another component of nurse practitioner training deals with materials from the behavioral sciences—role perception, human development, and family and community. Although your questionnaire responses showed reasonable agreement about the need to include material on the FNP role and on physical and psychosocial development, opinions varied on the need for material on family and the community, or on group dynamics. In each of these areas the majority of the scores were: (3) i.e., the material is essential. The remaining responses were mostly distributed between: (2) or non-essential, possibly elective, and (1) nurse expected to enter with sufficient knowledge. These areas of family, community, and group process were the only ones where a considerable number of respondents checked (1).

Is the assumption that the nurse enters with sufficient knowledge of family and community a reasonable one? I think not, if the trainee is a diploma or associate degree nurse. She may have wide subjective experience, but be quite unable to look at problems of family and community objectively. Is this material essential? Yes, if the practitioner is to extend her nursing skills and be able to offer more than the traditional medical model of care.

Conferences such as this will help in identifying the essential content of an FNP program. Each faculty group will then have to decide on the additional content they believe most important and the time allotment for each topic.

Time

Time is of the essence in an FNP program. The range of topics is vast and it is impossible to do them all justice. I have some concern that in trying to cover too much, we may be producing a group of "wine-tasters," nurses who have had a sip of this and that but no real draft of anything.

A review of the length of programs contacted for this conference showed that the shortest curriculum was 3 months with no preceptorship, and the longest was 2 years. However, the 2-year programs were in graduate schools and led to the master's degree and, presumably, included other content not strictly related to the nurse practitioner role. Preceptorship time varies from 9 to 12 months. In view of the quality control problem of the preceptorship, serious consideration should be given to the balance of time in the two phases of the program. Should the didactic phase be lengthened and include more controlled, program supervised clinical experience?

One possible solution to the time problem might be the development of core content and elective modules in such fields as geriatrics, family planning, pediatrics, or emergency care.

There is another time-related issue, that is faculty time. Many of the practitioner programs have piggyback classes, taking new students in as soon as others have gone out to their preceptorships. This would not be so bad if the number of faculty in a program were sufficient to adequately cover both groups and allow leeway for planning, evaluation and faculty development, and breath-catching. Failure to allow time for such activities leads to decrement in the quality of teaching, but time is money. Should we be focusing on quality or quantity? This is another philosophical issue which may underlie many of the discussions at this conference.

Testing

The last "T" is for Testing or in current jargon, Evaluation. There could, of course, be a whole conference on that so I will deal with it in a very narrow sense and restrict my comments to the question of self-evaluation. I choose this because of a nagging concern that our intensely goal-directed programs inhibit rather than foster what Randolph Bourne called the "experimental life." This was, he said, "to stand with mind and soul alert, ceaselessly testing and criticizing, taking and rejecting, poised for opportunity, and sensitive to all good influences *(9)*." Some will argue that we do not want the nurse practitioner questioning, testing, and criticizing. But do we want her to simply follow 1976 protocols unquestioningly without even a look at the *AJN*, to say nothing of a medical journal?

To what extent are students prepared to question their own practice and use self-evaluation as a guide to their own continued learning? Do we assume that the nurse comes with this ability? Perhaps some do, but I see remarkedly little evidence of self-directed learning in the general nursing community. There is a great deal of attending continuing education programs as long as attendance is on company time and CERPSs or CEUs are given. There is, however, very little evidence of journal reading or personal commitment to professional learning. Have any of you considered teaching your students how to audit their own practice? Developing the necessary criteria which would expand on the medical protocols could be a useful exercise and contribute to student development of a realistic role definition.

Do our course objectives limit, rather than expand, student horizons? In an article entitled "Serendiptiy and Objectivity *(10)*" published in *Nursing Outlook* last May, Margretta Styles questioned nursing's current infatuation with behavioral objectives on the grounds that by prescribing expected learned behaviors, they may inhibit both serendipitous learning and the development of the learner's self-concept and may fail to foster the experimental way of life.

Your questionnaire responses to the section on FNP Role showed high agreement concerning the need for content on role development and role relationships. I think you would agree with me that it is essential that the FNP have a positive perception of herself as a person capable of dealing effectively with life circumstances. How do you foster this? It may be a particular problem with the diploma or associate degree nurse whose previous professional and educational experience may have emphasized conformity and dependence on medical directives.

Styles, in the article just referred to, notes that circumstances which narrow an individual's perception of himself are: (1) "a high degree of concentration, and (2) threat to self as perceived by the behaver. The tunnel effect of extreme concentration may be desirable in some situations and undesirable in others. While it is valuable in test-taking, for example, it might be inhibiting in a clincical setting in which the person is so eager to achieve a particular goal that he rushes blindly for it ignoring other alternatives available to him. Threat occurs when the individual does not see himself as adequate to cope effectively with the circumstances confronting him. Then his perceptual field narrows, and this phenomenon complicates rather than facilitates the resolution of problems *(11)*."

It seems to me that if the certificate programs are to continue, and accept nondegree nurses, and if the FNP role is to encompass the breadth of practice implied in the definition of primary care, we must find ways within the time limitations of the programs to educate as well as to train. Are we providing a climate for learning in which the learner feels good about herself and is assisted to explore her own perceptions and ideas even as she doggedly learns the medical content essential to her craft? How are the values of self-evaluation, openness to criticism and personal responsibility for continued learning communicated? Are they evident in our own behaviors?

I promised you a paper full of questions and you now have them, at least enough to work on. I want to thank you for your patience and for the privilege of presenting these ideas to you.

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REACTOR PANEL AND GROUP DISCUSSION

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First I should list my background biases: they include internal medical practice in cardiology, undergraduate teaching of internal medicine, occupational medicine, and 8 years of work with nurse practitioners, starting in a pilot project in 1968 as cotherapist and preceptor with my colleague Mrs. Wang, who is here at the conference. We were exploring the expanded role for nursing, and the endeavor expanded me.

Dr. Nuckols has presented a very broad and provocative discussion. I value the opportunity to read her paper, and I trust we all will have an opportunity to read it many times. The questions posed are abundant and vital, and it is impossible not to react. To mention just a few things—in the area of *Tasks*, I think we all have problems in discussing primary care, a title I have come to detest, largely because any definition contains so many elements that discussion over any period of time is bound to result in communication failures. Are we perhaps trying to prepare for "super-triage?" Nurses have been good at triage for decades. Triage is best done with the most experienced skills available, but that's not the way it is done in any organization I have ever worked in. Usually it is the low man on the totem pole who does triage. Are we trying to prepare for "super-episodic care?" Using protocols and collaborative practice, this is highly feasible with nurse practitioners. Are we trying to prepare for the "super-public health or community nurse?" Such skills have long been highly developed in nursing. Are we trying to develop "super-personal health care providers" over the long term? This, I think, is the most different role we are considering and perhaps the most important in our curriculum. But I think we must all agree that elements of all these functions are desirable in the nurse practitioner.

The distinctive role is the provision of sophisticated and sensitive, continuous and comprehensive personal health care, including preventive, therapeutic, and rehabilitative care. We are not even sure how to teach this effectively to medical students or resident staff, though I think we are making progress with nurse practitioners. The pedagogic problem goes far beyond nurse practitioner programs, however. It deals with the medical model, the internal medical or pediatric model of data gathering, diagnosis, therapy. It is exhaustive, exhausting, comprehensive, expensive. Time is unlimited, cost is no problem. The model has great pedagogic value, I think we must all agree. The model can also deliver superb care. But it is not practical, and for universal application we have to move from this model to a form of practice which is more practical.

Still regarding *Tasks*, I would emphasize the importance of teaching the nurse practitioners to communicate effectively with the physician, verbally and in writing. This is essential for good communication and teamwork, but it requires tremendous effort on the part of the faculty of the nurse practitioner program to attain this goal. I would emphasize also the relatively neglected task of teaching team physicians the strength of nursing in the joint enterprise. I don't think any of us have addressed that enough, but it comes through as teams work together. Physicians tend to be strong in etiology, pathology and physiology and in the chemical or surgical intervention, decidedly less strong on the disability, the person, the job, the family, and even the psyche.

Regarding the *Teacher*, our program has used codirectors from medicine and nursing, joint planning, some joint presentations of didactic material, and joint preceptorships, all of which I consider important. The physician as teacher has some severe inadequacies which we must attend to. At worst, he may verbalize the textbook of medicine and promote a physician assistant mentality. The super-specialist physician may have a lot of class but little effectiveness as a teacher for nurse practitioners. I agree that nurse faculty should practice, but also physician faculty should be active in joint practice if they are to take part in programs.

Just a word regarding *Topic:* unless attitudes and skills and motivation for continuing education are provided, no topic list can be adequate. The pathophysiology base is important and needs, I think, a strong emphasis in programs. Excellent patient care exemplifies the scientific method. To observe well, to form a hypothesis about the problem, to test the hypothesis, and to observe the effects with an attitude of skepticism—this is really the scientific method and is what we are trying to attain. Protocols are useful but they must be existential. Their main value is to those who construct them. The operational team itself should prepare them jointly. They should never be passed out as handouts. They should be printed on paper which will self-destruct in 6 months.

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I also want to thank Dr. Nuckolls for sharing her paper with me. I read it several times and enjoyed it each time. Her six Ts helped tremendously in organizing my own comments. I have organized them in the same general way that Dr. Kirkham did, beginning with *Tasks*. The faculty of our Family Nurse Practitioner Program met yesterday morning, and I asked them what questions they would like me to ask of the consultants I would meet at this gathering. Their primary question is: Is it possible to be a family nurse practitioner in an urban area? Many of you are from rural settings where the concept of family can be better or more easily practiced, perhaps, than in an urban area such as Chicago. Also, what is the role of family in family nurse practitioner? Are we approaching family from a generalist sense, or from the psychosocial dimension, or both? Is our philosophical basis of practice the practice of community nursing, family nursing, or general nursing? These are all weighty questions for us who are in the process of curriculum revision of our graduate program at the University of Illinois. And other faculty members from other graduate programs are asking these same questions. We're finding that there are differences among us as nurse practitioners which we need to address and to solve in relation to our curricula.

In regard to continuity, which is an issue that Dr. Nuckolls addressed, our students enjoy continuity, they follow patients very effectively. Our problem is in integrating family and continuing to follow families rather than continuing to follow individuals. Perhaps some of you have raised those issues in terms of your own programs. And from the point of view of a master's curriculum, faculty have asked, "Where does this particular learning fit in a graduate program?" We are departmentalized at the University of Illinois. The Family Nurse Practitioner Program is in the Department of Public Health Nursing. Is this where the nurse practitioner can evolve most effectively, or are there other, more appropriate department homes?

In terms of *Teacher*, Dr. Nuckolls has described the issues concerning nurse-preceptor versus physician-preceptor very effectively and I would concur with the issues that she identified. Another question that we have for you as colleague consultants is this: have any of you developed effective relationships with family practice units in your areas? The family nurse practitioner, it would seem to me, is a logical colleague of the family medical practitioner, but we are finding that most of our medical supports evolve from pediatrics and from internal medicine. This fosters the specialty concept in our students but sometimes gets in the way of the family concept as we attempt to develop it. I think the issue of nursing expertise is a real one: the only effective way that we have found to resolve this issue is by development of joint appointments with practice settings, using as nurse-preceptors nurse-educators who are simultaneously clinicians in the practice agencies where students are learning.

In terms of *Trainee*, we are finding that baccalaureate programs are changing as Dr. Nuckolls identified in her paper: our baccalaureate students are learning health assessment skills in their basic nursing program. Also, we are finding that many of our applicants are graduates of certificate practitioner programs who now want to come into a master's program and are asking what a master's practitioner program can give them beyond their certificate preparation. That's a very heavy question. How can we build on the skills of the certificate program graduate?

In terms of *Topic*, I need to share a personal bias. I will articulate it here, though perhaps in practice I may compromise my own beliefs: I don't believe that we as nurses hold our colleagues accountable for their previous nursing education. We need to expect nurses to be professional people: and a part of being professional involves self-education, keeping current with whatever is occurring in one's field. Very often we think that we need to do remedial preparation for programs. We do not expect the nurse to take the time and effort to review, for example, anatomy or physiology before starting a program.

Management is also changing. What we teach today in practitioner programs in terms of how to manage a particular kind of health problem or need will be different from what the management will be in 5 years. Content is very elusive. I think we need perhaps to teach process, the process of identifying a problem and seeking solutions, studying and researching the problem in order to resolve it with a patient, with a family, with a population of patients.

There is never enough *Time;* this is probably the major complaint of our students. There isn't enough time to do everything the student would want to do in the program. In terms of program evaluation, one of the primary problems our graduates are encountering is this: if the employment agency discovers that the nurse practitioner has a master's degree, the tendency is to involve the applicant in something other than practice. It's very difficult for the master's-prepared nurse practitioner to practice only. She gets involved with many other things as she moves into the role. Also, we are finding that some public health agencies cannot afford to employ a master's-prepared nurse practitioner as a practitioner only, in terms of job lines and salary.

Member of the Audience:

When I first started out, I thought it would be ideal to train with a family practice, but I have changed my mind. I want to stay away from family practice because they are training residents who are very anxious to have all the experience they can possibly get, and it's difficult to integrate nursing into that at the preceptorship level. Maybe if we could have a different model of family practice with some kind of interdisciplinary work together from the beginning it would be better, but I have almost given up trying to integrate nurse practitioner students into family practice as it is now.

Member of the Audience:
I don't want you to give up. Whether one starts from the point of view of family practice or nurse practitioners, really what we are having trouble with here is health care delivery. Nurses have come on the scene and been able to give us some light, but if very early we do not combine the nurse and the doctor, in their training and educational programs, then we don't wind up with medical teams. We've talked about the team for years, but we've never succeeded in making it work. I want us to keep trying, however.

Julia Watkins:
What you are saying, though, is that teamwork has to start very early in the education of these people.

Member of the Audience:
I have a hard time agreeing with you. We're very much involved with practitioners who have been in practice for eons of years, in underserved areas. We have introduced family nurse practitioners in 29 rural sites where no one had ever worked with the doctor except in the old ways. These doctors' attitudes have changed over time. The private practitioners delegate a great deal of responsibility to young nurse practitioners, and they have a good team operation. The dictating factor is time. When you're overworked and you don't want to abandon your patients and you need help badly enough, you'll sacrifice money to get some time. And in a family practice residency situation, the individual are furthest along with their training, and the further they get down the pike in this training and begin thinking about practice sites in underserved areas, the more they must think about time off. I think that it will make sense to them to use FNPs and the joint training *can* begin at that level.

Member of the Audience:
I've worked in rural and suburban communities, and it seems to me that regardless of how one looks at the team model, we've had a notable lack of success, even though we have tremendous rural health care problems. It seems to me that the crucial issue is what is going to happen with financing the FNP. Who is going to pay?

Member of the Audience:

I agree with what is being said about certain potential problems with nurse practitioners in family practice settings, but I think that this is the central thing to keep striving for. I think what probably needs to be done is to look very closely at the individual programs; in many university settings family practice is a threatened role. But if you look at two or three of the community-based family practice residency programs you find that for a variety of reasons these residents seem less threatened and therefore are more comfortable working with nurse practitioners.

Julia Watkins:

What I'm hearing here is that where one is a threat to the other, then there are problems. Where people are secure enough to learn together, there are not.

Member of the Audience:

I would like to make a comment in response to something that Dr. Nuckolls and many others have talked about and that is the emphasis of the nurse practitioner on providing caring, concern, and coping. The more I look at nurse practitioners the more I cannot distinguish between nurse practitioners and physicians—I see us all as clinicians. Whether in providing clinical care to patients, we are willing to provide compassion or not, is more a matter of an individual's function as a human being. Certainly, some physicians are lacking in these qualities, but as faculty in medical school, we are working very hard with students to improve. I wonder it it's really a fair distinction to say nurses have an edge on these qualities.

Katherine Nuckolls:

I don't think it is fair to say that nurses have an edge. I think that one of the advantages that perhaps a nursing background brings to what is sometimes called the midlevel health care giver (as opposed to say, the P.A. and to some extent the physician) is that nursing training and clinical education in a hospital keeps you in contact with a patient 8 hours a day over repeated periods of time. So we get a different perspective on what illness means. I think that certainly P.A.s have limited contact, more limited even than the contact physicians sometimes get. The other point is that recently baccalaureat nursing programs have been very heavily focused upon psychosocial care (to the detriment, I think sometimes, of medical science). But I agree also with what you are saying, that an awful lot is the individual human being, and a lot is the extent to which the individual is cared for as student, and later as a worker.

Member of the Audience:

It seems sometimes that as educators we get caught up in a program and what we are doing in the program. We have put medical students and nurse practitioner students and residents together with varying success over a period of years. What I am wondering though is what is the critical issue in terms of practice out in the community? Our research is telling us that however well our students do in their program, when they get out to practice, quality changes. The quality seems to be related to the practice setting they are in. We as educators sometimes get closed in within our program and we don't pay enough attention to the practice setting. I am very concerned about that; and if we really are going to have impact on the delivery of services then we are going to have to change the settings. Physicians have often come out of medical school and residency programs wanting to give good care, and while feeling that way turned out to give lousy care in many instances because of the way they were forced to practice. We have to pay a lot of attention to that with the nurse practitioner also.

Katherine Nuckolls:

There is another problem too. Depending on where the nurse practitioner works, but assuming that she works in a one-to-one relationship with a physician or with a physician group, she is usually their employee, which is different from being a partner in the enterprise, in the practice. As their employee she is forced into the practice as they define it and is much less able to define the way the practice goes than she would be if she were a partner. This is something that really concerns me: as things go along, she is really pretty helpless. The nurses who are master's-prepared nurses have more going for them in some ways: they are more able to stand up and direct what they will and won't do, but for the diploma nurse who has always been subservient to a physician, it is very easy to slip back into that.

Member of Audience:

As the first young physician to go into practice in my area in 20 years, I faced the same kind of problem with the doctor I joined that you are talking about. I think the issue really is that of defining new roles, more clearly. I think faculties themselves would have difficulty defining what the nurse practitioner is really doing in the field, just as young physicians have had difficulty defining what they are doing. A well-defined role makes it more comfortable for both physicians and nurses to work together, and I think it would be very good for nurse practitioners to enter into the field with physicians with well-defined protocols and well-defined roles.

Julia Watkins:

We need to make arrangements between nurse and physician and encourage them to work on cooperation, collaboration, to not always be in the employer-employee relationship. But the ultimate question is where does the money come from?

CLINICAL EVALUATION: AN EXAMINATION OF THE STATE OF THE ART AND ITS APPLICATION TO NURSE PRACTITIONERS

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Clinical evaluation, or more precisely stated, the evaluation of clinical competence, is in my estimate one of the most difficult problems facing the health professions. This is true whether one is talking of the field of medicine, nursing, physical therapy or any other of the health profession disciplines. There are several identifiable reasons for this state of affairs.

On the one hand there has been a rapid evolution of new techniques and insights into the process of evaluation of clinical competence. These are probably best summarized by Hubbard in his book *Measuring Medical Education—The Tests and Procedures of the National Board of Medical Examiners (1).*[1] The "art" of clinical evaluation has clearly been revolutionized by the discipline of the educational psychologists, and we in clinical education are now forced to develop new, scientifically valid criteria and techniques for assessing clinical competence. The shaky art of the subjective assessment of clinical competence through inquisition, otherwise known as oral exams, is rapidly vanishing.

On the other hand, however, as our technical capability for assessing clinical competence has grown, the demand for this capability has grown at an even greater rate. First, there is the sheer numbers game. Society has dictated and we have responded with an outpouring of health professionals of all types, in ever increasing numbers. Devising appropriate techniques for, in effect, "mass producing" the assessment tools for evaluating clinical competence is no small task!

Coupled with this has been an increasing demand by society that we insure the competence of health professionals at regular intervals—not simply on a "once for a lifetime" basis. This has led to the rapid proliferation of programs in recertification and relicensure. Thus, we have not only the numbers of new practitioners to be certified, but a growing pool of previously certified practitioners who require recertification.

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[1] Numbers in parentheses refer to references cited, page 49.

As if this were not enough, we have further compounded our problems by two other developments: (1) curricular tinkering and (2) development of new health professional roles.

No longer are medical, nursing or other educational programs static or standardized. They come in all sizes and shapes, and assessing the end product represents ever new challenges; however, it is in the creation of new health roles that I feel we have created both our greatest problems and our greatest opportunities and this, obviously, is the major focus of my remarks here.

Nurse practitioner programs appeared on the scene in the mid-1960s, almost a decade ago. The first problem obviously was the definition of the role. In the brief span of years since introduction, a general consensus as to the nature of the role seems to have developed. I base this conclusion on two factors: (1) a continuing survey of the literature describing role and function, and (2) the responses to the questionnaires used in preparation for this conference. Granted, there is still debate on many issues; however, a solid core of concurrence has evolved, and thus, one of our major problems has been largely resolved.

We are left then with the central problem, and, as I see it, the opportunity, of developing appropriate methods for assessing the clinical competence of nurse practitioners. These methods, in turn, will be applicable to the generic problem of assessing the clinical competence of all health professionals.

What, then, are the available tools and techniques—their assets and liabilities? At one end of the spectrum are those tools and techniques designed primarily to evaluate the *role* of the nurse practitioner rather than individuals. I am referring, of course, to such studies as the pioneering work of Lewis and Resnick *(2)*, Charney and Kitzman *(3)*, Chappel and Dragos *(4)*, Machotka et al. *(5)*, Duncan, Smith, and Silver *(6)*, Fine and Silver *(7)*, Spitzer et al. *(8)*, and other similar studies (see Cohen et al. *(9)* for a summary) in which a variety of techniques are used to assess the nurse practitioner role. The majority of these utilize techniques in which the care or process of care of the nurse practitioner is compared to that of another health professional, usually a physician. Although essential to the development of the nurse practitioner role, these methods are ill suited to the everyday assessment of clinical competence of individuals, for several reasons. For one thing, they are quite costly in terms of time and effort. Perhaps more important, however, is the fact that these methods are difficult if not impossible to standardize in a manner such that they can be applied to large numbers of individuals.

At the other end of the spectrum of available tools and techniques is the objective multiple-choice type of examination. The evolution and development of this tool are well described by writers such as McGuide *(10)*, Miller *(11)*, and Hubbard *(1)*. Without belaboring the point, I think the limiations of multiple-choice exams are well known to all of us. Although questions can be constructed that test higher levels of skill, including problem solving and judgment, the method in most cases tests recall and recognition. I personally advocate the continued attempts to develop valid, reliable questions that indeed can be shown to measure problem solving and judgment; however, I feel the method is intrinsically limited and we should not put all our eggs in this basket.

The problems of the traditional oral exam have been alluded to earlier in this presentation. A humerous anecdote might best illustrate one major variable that is difficult if not impossible to control—patient variability. The late Dick Weinerman allegedly told this story of his Medical Board experience: The patient was an elderly wizened wisp of a woman with a bewildering complex of symptoms and signs. After much effort he was obviously stumped and time was running out. Sweat was pouring from his brow as the elderly woman invited him to lean closer. Quietly she whispered. "You a good Jewish boy?" "Yes," Dick quickly affirmed. "Lupus," she quickly whispered.

The other side of the coin obviously is examiner variability. Despite these major problems, one should not completely discard the oral exam method until one has explored efforts at standardizing the method such as described by Harden et al. *(1)*. Theirs is the most recent in a series of efforts to control the two variables; however, I personally despair of major success in the area and feel Hubbard's summary *(1, pp. 93-99)* still accurately describes the method as wanting.

It is obvious from reviewing the material you forwarded in advance of this conference, that most of you are relying on your clinical preceptors to render some assessment of the clinical competence of the nurse practitioner students they precept. It is clear from reviewing this material that many hours have been spent in attempting to standardize the observations made by the clinical preceptor and to facilitate his reporting through the use of some form of clinical evaluation protocol. I hope you have had better success than we have had! The same two problems that haunt oral exams of the traditional variety also plague our efforts to standardize this aspect of evaluation. One might hope that the variability of the patients would "average out" over the course of a clinical rotation. This may happen, but unfortunately we still find a great deal of variability in the kinds of patients to whom students are exposed. The second variable—the variability of the observed/preceptor—defies standardization. In our program, we are fortunate in having a relatively small pool of knowledgeable, interested, involved preceptors whom one would think we could program to give consistent responses on clinical evaluation protocols. This has simply not proven to be the case. The two most common response patterns are: (1) no response at all or (2) all "3s" or whatever other code signifies a "good" performance.

The one area where I feel we have made progress I suspect is shared by several of you, based on the forms you submitted. We have developed a protocol for teaching and then evaluating the students' ability to technically perform a complete physical exam on a presumably healthy patient. Here, as opposed to the "sick patient" type of clinical encounter, the variables are fewer in number on both patient and observer sides of the street, and we feel confident we are getting reliable data regarding our students' performances. In areas of actual clinical practice, however, our efforts simply have not paid off in any demonstrable manner.

Let's now turn to the area of endeavor that I personally feel holds the greatest promise for producing consistent, reliable, valid data with regard to the assessment of clinical competence—the use of standardized programmed patient management problems or, as we call them, logic problems. Hubbard again provides the most cogent review of the basic principles for the development of the patient management problem *(1, pp. 40-50)*. He acknowledges the contributions of such early workers as Rimoldi *(13)* and McGuire *(10)*. I am assuming that most of you have had some experience with the method and will not bore you with the details of constructing logic problems. We have now had 4 years of experience in developing, testing, and validating a pencil and paper series of clinical logic problems that seem to hold great promise for enabling us to reliably measure areas of problem-solving and clinical judgment that are at the crux of the evaluation of clinical competence. The format we use involves a brief statement of the presenting complaint followed by items of historical information, items of a complete physical exam, and lab studies which would be found in most primary care clinics. The items from which to select on the physical exam and lab remain the same for each problem; only the answers change, thus eliminating some cueing. Once having gathered data from these sections, the student must list the identified problems and indicate which bits of data are related to each identified problem. In a fairly simple format one then gets information on patterns of data gathering: too much? too little? Does the student avoid unsafe practices or procedures, etc.? One gets a good indication of the students' ability to problem-solve by analyzing the problems they identify and their ability to properly correlate appropriate data. They then are asked to outline a plan of further investigation or management which completes the cycle of clinical management.

What are the major problems of this method?

1. It is difficult to standardize the grading. A major problem here is

developing relevant norms for nurse practitioners.

2. The method involves data gathering by pencil and paper only. One cannot assess the student's true ability to obtain a history from a patient, detect and properly assess abnormalities on physicial exam, or perform and interpret lab tests.

I think that techniques exist for us to overcome both of these problems. The first simply requires additional experience in validating our norms. The second certainly is more complicated. Many innovative approaches have been developed to move from pencil and paper closer to actual patient simulation. Photographs of patients, X-rays, lab specimens, reproduction of electrocardiograms, etc. have been extensively used by many workers in the field for this purpose *(1, 11)*. Use of the computer to present and simultaneously score the problem has advantages, but I feel the added cost and loss of flexibility outweigh the advantages. Recently there has been renewed interest in the development of sophisticated manikins to facilitate the teaching and evaluation of clinical competence. Abrahamson *(14)* describes the development of SIM I, which is oriented primarily to anesthesiology skills. Gordon *(15)* describes an elaborate manikin that can stimulate 50 or more cardiac diseases with the synchronous presentation of tactile (precordial impulse, arterial pulsation, etc.), visual and auditory phenomena. He projects a "marriage" of the clinical logic problem format with the manikin to produce the ultimate standardized objective clinical management problem.

This to me begins to border on the Buck Rogers fantasy world, and I wonder, is it all that complicated? Isn't there a simpler answer? My agonizing conclusion is *No!*

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REACTOR PANEL AND GROUP DISCUSSION

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Probably my title should be Associate Professor of Ambiguity. Any of you who have tried to prepare generalists from varied backgrounds know full well the difficulties in evaluation that Dr. Pickard has outlined. Many of our nursing leaders would agree that we have not developed criteria or methods of clinical evaluation in general; thus, it's especially difficult for us in nurse practitioner programs to develop clinical evaluation tools when we have not been successful in doing this in nursing. One of the exciting things about the nurse practitioner movement is that we're working with other professional groups, and especially doctors, to develop methodology in clinical evaluation. However, one of my biggest complaints is that quite frequently clinical evaluation of nurse practitioners has been done largely by doctors, looking mostly at the expanded role and without considering the total spectrum of comprehensive health care.

I agree in general with most of Dr. Pickard's points and concur on the difficulty of patient variability and observer variability in evaluation. However, I feel that subjectivity is really not a bad thing in evaluation. Of course you have to know what you have to teach and you have to be able to use that knowledge in observing: when we have done subjective evaluations in our program, we have frequently written down how we ranked these students, and we have found that, by and large, the informal rankings of all the faculty agreed pretty well with what we had arrived at with our other evaluation tools. The fact that we all have some kind of built-in evaluation process in our socialization enables us to determine "What is a good nurse," and "What is not a good nurse." And though I'm not saying I think that is the way we should go, I don't think we should discredit the subjectivity of the nurse in the evaluation process.

On several points I disagree with Dr. Pickard. In our experience the oral examination seems to be a valuable tool, selectively used. It takes a great deal of faculty time to do it well, but I think it has some advantages for both faculty and students. The oral evaluation allows faculty to evaluate the depth of understanding of the student in any particular area. It forces students to verbalize their ideas and express them clearly and completely. It allows faculty to evaluate the effectiveness of their teaching. It points out errors in a student's approach to a problem and allows faculty to see *how* the student approaches a problem. One of our assumptions is that examinations should provide learning as well as evaluation, and we try to make each evaluation experience serve also as a learning experience for the student. We have used oral examinations several times. The first time was a 2-day session in which nurse practitioner faculty and two doctors sat and talked with the students about how they would handle five selected emergency problems. We have also used oral exams in our pathophysiology course, with each faculty member preparing an oral examination in a particular subject area. The students are then rotated through the evaluation areas, answering oral questions. We have extensive observational criteria for the answers (which took a lot of faculty time to write out) so that we can evaluate the students' oral responses. The criteria are then shared with the student.

This year we developed pass/fail modules for each student. One of my biases is that clinical evaluation should be on a pass/fail basis. The students go through each system or unit and, in order to determine clinical competence in that system, we have a clinical examination at the end, on a pass/fail basis. The student has to repeat it until he or she is competent in that area. Faculty members have the choice of using oral or written examinations at the end of each unit.

By processing students in this way, with a particular interaction with the faculty, the faculty gain a very good idea of what difficulties the student has in handling any problem in this way. You never get such definite information about a student from multiple-choice examinations or other kinds of situational experiences. I tend to think that at this stage of the art we should be thoroughly and deeply immersed in observation of students in the real world. We can't develop criterion references for evaluation until we get out there and look at the students and what they are doing, then we can develop some kinds of measurements through this immersion in actual observation. I don't think this is very easy, given the multiple demands on faculty. Perhaps that speaks to another point: probably truly scientific and rigorous evaluation could only be done if you hired someone from outside to do it, because the amount of time it takes to develop clinical evaluation and meet the criterion of reliability is overwhelming.

One question that we have in our program is: where are our students when they enter the program? I'm sure we're all faced with that, because we have a great deal of variability in all programs. In Washington we have tried to deal with that variability by using self-reports of where the student is and a cognitive test built out of the experiences of various programs in the Northwest—medics, continuing education, and nursing. We have used these tests as diagnostic tools for our students, to discover where each individual student is, and to do program evaluation and personal diagnosis. The tools are shared with quite a few schools in the Northwest and if anybody wants to use any of them, please write to the University of Washington. We'd like to have more validation and improvement of these particular tools.

A second test that we have used in evaluation of our students is a pass/fail test on physical diagnosis. All of our students have a detailed behavioral guide to evaluation of the physical examination, and all students have to pass this evaluation. We have found this a very helpful tool in evaluating where the students are in behaviors that are a part of the screening physical examination.

We have never had preceptors in the field participate in clinical evaluation of the student; we use faculty to do that particular type of clinical evaluation. We feel that faculty are in the best position to be consistent and to apply identical standards. Like Dr. Pickard if we use any kind of form, we always get "excellent" to "superior" in the results. We have a lot of complaints from students about patient variability when they are doing evaluations with patients: "I had a harder patient to take care of than you did." I don't know any way to deal with that, except to try and look at what was going on in the clinical evaluation that made it harder for some students than others. This year we had both faculty and doctors do independent evaluations on the same patient. Then we independently rated them and averaged our ratings and shared the results with the students. And we think the more we have multiple observers to evaluate clinical competence independently, probably the fairer the evaluation, or the fairer the student will feel the evaluation is. Actually there wasn't much discrepancy even when we did it independently.

We have experimented with several program models, and have gained a lot by working with other nurse practitioner programs in continuing education and in medics. The medics program has done a good deal of independent clinical evaluation, using observers from other schools or other places to evaluate their students. The continuing education program in our university has developed tracer programs in which a physician panel and nurse panel determine criteria for certain common conditions like vaginitis and sore throat, and then establish certain criteria that could be audited by anyone in the record. The Regional Medical Program hired an evaluator to develop this particular program, and it was very expensive. But criteria for a tracer evaluation are very useful in developing more reliable evaluations. We have, of course, played with evaluating patient management problems and situational problems using slides and X-rays; we have students come up with certain answers which have been determined to be valid by a nurse jury. These kinds of evaluations are very meaningful, but they are also very consuming of faculty time. The more we can develop and share valid tools, probably the more efficient we can be.

Once we get these tools together, perhaps we will be more able to evaluate the product. I think the role change has forced all of us to look very closely at clinical evaluation. I don't know that we have any answers in the area. We haven't arrived at the perfect package of clinical evaluation for our students, but I do think it is an exciting and challenging area, and working together, we're going to come up with something that will be good.

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Dr. Pickard, I'm amazed at the sensitivity of a physician to the intricate issues in the evaluation of clinical competence. I am even further amazed by an assessment of the literature which so clearly points out that literature's major weaknesses. This paper has raised a central, critical prior issue which gives us a way to look at the paper's content. A most important question in evaluating clinical competence is the definition of clinical competence. A great deal of time has been spent articulating the role and function of the family nurse practitioner. However, I suspect that if we had 3 hours to spend together, we'd get into a real hassle over the specific definition of FNP clinical competence.

Let me say that another way: a critical question is "What is it that the family nurse practitioner does?" Much of Dr. Pickard's paper focuses on the tools currently being used to evaluate "competence": multiple-choice questions, oral examinations, preceptor ratings, simulation models, paper and pencil games—all assuming that you have a mutual defintion of what it is that the family nurse practitioner does. I once spent more than a year and a half with a Department of Pediatrics' third-year teaching committee which was attempting to answer the question, "What is it that a pediatrician does?" in order to develop objectives for a learning experience for third-year medical students. The committee became involved in lengthy debates over the role and function of the pediatrician which exposed, at the same time, some serious variance in their views with respect to this question. Now, you find yourselves in the midst of the same discussion. "How do you as a family nurse practitioner do what you do?" This question, I suggest, points to the context within which the clinical evaluation (and, therefore, state of the art) so far as FNPs are concerned needs to be addressed. I urge you to find ways together to do so.

Let's talk for a minute about some things that are implied by this approach. If you tried to define clinical competence by the tools you have used to measure it, I suspect that what you now call the "art" of being a family nurse practitioner would be lost. I don't believe that multiple-choice questions, or logic problems, or simulation models, or oral examinations *all together* capture what it is, in fact, that the family nurse practitioner does, no matter where she—or he—does it. One way to avoid this trap of "objectivity" is to focus on "diagnosis" and "management." To assume that if the family nurse practitioner can recognize lupus, that such recognition is somehow a measure of her clinical competence is, I suspect, naive. I don't believe that the defintion of the family nurse practitioner is confined to the list of 287 diagnostic entities that the family nurse practitioner is competent to recognize. Certainly you can't believe that either. However, much of the evaluation strategy currently employed assumes that we can agree together on the 200 or the 100 or the 15 diagnostic entities that the family nurse practitioner is qualified to recognize.

That leads me to suggest also that "Why evaluate?" is an important question you need to address. That's a typical evaluator's strategy, when confronted with a horrendous problem. But why *are* you evaluating? Whose questions are you answering? Obviously, a series of questions are involved—the faculty's questions about their effectiveness as teachers; program questions about success or lack of it in the articulation and students' assimilation of a curriculum with cognitive, psychomotor and attitudinal components. And there are also society's questions: is the family nurse practitioner safe, and what does it mean if a family nurse practitioner is safe? That's also a nursing question. What does it mean if a family nurse practitioner can do what it is that you say the family nurse practitioner can do, if in fact you are not in agreement about what it is that you *do* as family nurse practitioners? Does a score of 85 on a multiple-choice exam mean, if I took it, that I'm safe? One of the problems with automated simulated models is that after 3 years of use the students pass down by the oral tradition all the information they need; they know exactly what model is being used and the range of 32 functions it can display, and they can make a good score on the examination. The same is also true of multiple-choice examinations. The same is true of almost any of the strategies you employ for the oral exam. The students quickly learn (like medical students) to recognize in those to whom they present patients, who expects what and in what form. If you listen in the hallways of the services, you will hear the residents telling the students how to present to A and how to present to B: "... and he expects it in this form, and he expects it in that form." The students run back and memorize that thing and present just like that.

Another question concerns the tools themselves. A man I respect very much who, incidentally, conducted the workshop at the University of North Carolina in which logic problems were first introduced to this campus, convinced me several years ago that there's nothing objective about objective testing except the statistics used to analyze them. If you think about that, it's true. In fact, though, he failed to tell me there is subjective bias in the statistics themselves. Another serious problem with clinical evaluation for FNPs is the problem of competency-based, rather than normative-based criteria. I believe there are representatives here of both sides of that argument. The tools are designed to elicit data to answer questions. The definition or the content of such questions only you can agree upon. What is competency for family nurse practitioners? And do you want to develop a strategy for terminal evaluations that defines family nurse practitioner competencies in relation to criteria? How can you do that if you've not answered the prior question of what it is that the family nurse practitioner can, in fact, do? Logic problems are an example. Most of the literature Dr. Pickard referred to addresses itself to branching format simulation problems. That literature is focused on the kind of format the National Board of Medical Examiners uses, or the patient management problem. A logic problem, on the other hand, is linear. There is very little, if anything, published on the linear format. Little research has been done on the competencies that it purports to elicit. Although a great deal has been done privately among faculty people in establishing face and construct validity, this experience has not translated itself into the literature.

There is a myth about the expense of computer applications of simulation technique. In fact, in computer terms, each of the logic problems is the software. What we lack is a fully capable program, such as that at the University of Illinois, Case. Case is a branching format program which includes a routine for writing new problems. It's very inexpensive once installed. There is not a corresponding format in a linear mode.

In conclusion, I find this paper extremely useful as a look at where we are with the tools and an assessment of some of the weaknesses in those tools. Since I've been encouraging use of one particular tool, the clinical logic problem or the logic problem, let me add one more insight on that subject. If you take a multiple-choice question with five alternative responses, in a test of 100 or 200 items (or in Board tests or tests for certification of medical subspecialties—600 or 800 items) what you accumulate is secondary evidence which enables you to make a reasonable guess that a person who makes a given-level score knows something about the field. What you don't know is, given a stem and five alternative responses from which I have correctly selected the best answer, how I got my selection. And I suggest that the way to begin looking at answers to the question of what is it that family nurse practitioners do and how do you do it, is to articulate together how you go from recognizing stimuli in the stem of a multiple-choice question to selection of an alternative response. That, in fact, is where the logic problem came from. It's an attempt to define information gathering, information processing, information utilization, in the formal terms of problem solving.

I believe that will put you at the interface of a very sticky problem. You'll find yourself discussing what it is that a physician does and how he does it, and what it is that a family nurse practitioner does, and how the practitioner does it. You will certainly discover similarities—if not that very often it is identical. To differentiate the family nurse practitioner from the physician on the basis of those diagnoses that the family nurse practitioner is competent to recognize will make all of you uncomfortable, nurse and physician alike. In fact, clinical evaluation, or the clinical competence of the family nurse practitioner, I believe, rests in the family nurse practitioner's ability to replicate a decision-making process that is common to all disciplines where the work "clinical" is used and which utilize subjective and objective data to test alternative hypotheses in relation to identified problems, and to evaluate and alter various interventions toward specific ends. There is something there that is incredibly important to define and articulate. In its simplest terms this is a description of the scientific method, whether it is the FNP or the physician who is using it. This observation underscores the concern I have raised about "how do you do what you do?" But further, it suggests an avenue of approach for the answer.

Member of the Audience:

In connection with comments about the simulator—not a computer but a full body simulator—I recently had a chance to fly "an airline simulator," which reproduces even the wind noise as it swishes around the plane. And though I knew it was bolted to the ground, it was so realistic that when I emerged from my crash I was literally quaking in my boots. The question that occurs to my mind is this: if just one airline has 12 of these and they cost between 3 and 6 million dollars apiece, and every pilot—not just a few—every one must go through that simulator every 6 months, what's wrong with a social policy that insists on that kind of training and expenditure for pilots, and not for clinicians who have no less responsibility for human life?

Member of the Audience:

Obviously, in regard to evaluation, we need a lot of work and we need a lot of help from the experts (I'm always a little in awe when I come to UNC and find the breadth and depth that exist here in so many areas). But there's a technique that we've just started to use which might be promising for other programs. We do observations of our students, either by directly sitting in the room with them when they do a visit or by videotape or sometimes by audiotape. And in order to be able to count on us as faculty members to know what we mean by "clinical competence," we sat the faculty down and said, "ok, what in an observation do we want to have?" Then we broke down the visiting to information-gathering, types of questions that were asked, the specific data elicited, and the manner in which the physical examination was performed. We included the art of the visit, as well as the scientific part of the visit. Then, once we had agreed on what a good visit was—broken down into its components—we devised an observation format.

Next we wrote up a training manual for this observation format and trained our faculty by using videotapes of visits. It took a number of sessions to get interobserver reliability, but once we got that, we had some confidence that when we sent our faculty in to look at students, or to look at graduates, we were getting comparable data back.

This was a tremendous learning experience for the faculty, because we redefined many things that we had thought we agreed on, and we also then set up a format for doing the observations. Since most of us are doing these kinds of observations in our programs, we might pay some attention to this as a preliminary mechanism until we have help from the experts with more erudite kinds of evaluations.

Member of the Audience:

I have a question for Dr. Pickard. In preparing clinical simulations, do you have any trouble getting physicians who will be in agreement, isn't the tool invalidated?

Glenn Pickard:

Yes, we do have major problems, and they have not been finally resolved. However, with our own particular clinical simulation model, the approach we're using is to reduce the logic problem to a multiple-choice question. That is to say, we pick out the key factors, and say, "If a patient, a 23-year-old white female presented with the following symptoms, the following signs, what would you diagnose this as?" These are then widely circulated, and there is reasonable concurrence. Since as Bob Koewing said, all that a logic problem is is a fancy multiple-choice question, if you just reduce it to that, and then you circulate it, you can standardize it much more quickly than if you passed the whole logic problem around. That would take forever. It's ultimately necessary, but the first step is to say, "Do these symptoms or signs lead to this diagnosis?" The converse is also an approach we're using. That is to say, you're dealing with a logic problem: given this diagnosis, what are the key symptoms and signs? Then we send that around. In this way you can quickly develop at least some validity without having to go the route of testing logic problems per se—though ultimately that's the way we have to go. Thus we have a strategy that makes sense, we use it quite a bit, but boy, it is tough! And there is no question about it, when you get down and start saying yes, no, shades of gray—do you have a simulated normative value, a criterion measure? For this logic problem do you have a range of scores that mean anything? Yes, no—it's tough.

Robert Koewing:

That's the sticky thing about that interface. Let me describe the nature of the problem. In trying to develop a problem format appropriate for medical students, the question is, is, in fact, the physician being taught, or the student being taught to appropriately rule out/rule in? My question is, is the family nurse practitioner being taught to appropriately rule out/rule in?

If so, in terms of standardizing the logic problem, the process by which the physician reviews—and the family nurse practitioner faculty reviews—is essential to defining what is absolutely minimum acceptable behavior in terms of the process of ruling out, ruling in, given the patient who presents. That's the difficulty of the problem. And the difficulty is at that hairy interface between what is a physician and what is a family nurse practitioner.

Member of the Audience:

My question relates to our heavy emphasis on the medical component of testing skills. What are we going to do about the nursing component? I see it as very important to expand this part, so that the nurse practitioners are doing a different kind of thing.

Glenn Pickard:

I was just about to say something on that before you asked the question. We dwell on that a lot in conversations and with instructional questions. In our experience, that's for some reason where it's at. I think part of it is that it's very difficult to define those things that are nursing. That's a very, very tough issue. We have tried in our logic problems to include those things that we believed were nursing. We have tried to include problems that involved psychosocial issues. We have tried to include problems where the key element was counseling, teaching and so forth, and each time we did this we found that it didn't work out.

I think it's the substance of what nursing is that's the issue; it's difficult to define, and it's difficult to discuss. But I wholeheartedly agree with you that that is the biggest single need in terms of the content of the kinds of things we're doing. Not the method, but the content. And I am guilty; my colleagues will tell you that I keep turning out generations of logic problems, and they are medically neat, and all of them sound fascinating. But all of a sudden you say, "what are we doing to students?"

Julia Watkins:

Would any nursing faculty who have been working on these problems like to say something?

Member of the Audience:

We've been working with case studies, and having the student present one case study and go into depth on a problematic health behavior or creative nurse management. That's a way of trying to get around these difficulties—because we found we were doing the same things that you've mentioned. We're using the ANA standards of practice as our guidelines for writing the case study. I don't know how good this method is. As you say, it's a terribly difficult thing.

Rosemary Pittman:

My main beef is that we have a whole group who wish to define the problem as health care, and not separate out nursing. Any time we try to look at the nursing component, we get into an argument about "this is health care and it's not nursing." This goes on all the time; I don't think it's terribly productive. If you will look at our evaluation tool, you will find that we did try to identify the nursing behaviors in the assessment. Every time you bring this up for doctors, they say, "Oh, the doctor does this too," but I think the nurse does emphasize the comfort of a patient, for example, and try to define the parameters of the relationship with the patient, and be sure that the patient has his or her care and comfort needs taken care of. The nurse attempts to help the patient work out how these things are going to be done. The nurse attempts to find out what the patient knows about the problem. I've been involved in some research studies with nurses and doctors in contrasting their care, and the doctors by and large do a lot of telling. This seems to be the common mode. This is not because doctors are inferior to nurses; it's because they're at the top of the hierarchy. When you get in that position, that's seductive—being at the top. I do believe that there is an arrogance about the doctor who says, "We shall evaluate the nurse practitioner," and I tend to react somewhat to this. I think evaluation should be a cooperative process. Granted that in nursing there is a continuum on every behavior, and that people at different stages—in an AD or any other program—can be at various levels on that continuum, I still think we need to identify those areas where nurses should emphasize their particular input into the health care program. These are just as important as all the other areas. This gets into the whole matter of patient compliance, and the fact is, it doesn't make any difference if you have the most skilled person give the care, you may not have one bit better compliance. In looking at clinical expertise, this is an area we need to focus on. What is it that makes a difference in what the patient does? This is really a neglected area of clinical evaluation.

Member of the Audience:

We find among graduates of our program that there are expectations in the practice setting in regard to record audit, quality control, and utilization of the practice—the kind of data that many people are interested in, and that an individual or individuals in the practice setting could be studying and could be concerned about. It seems appropriate that a part of the curriculum of the family nurse practitioner program address some of these questions and issues in order to prepare graduates with some of these skills. They are involved and they are expected to be involved in this kind of activity; and I'm not sure that we have prepared our graduates adequately to assume this kind of responsibility.

Member of the Audience:

Have any people here used the Joint Commission's forms? I realize they are simply made for hospitals, but I'm interested in those forms in which one is asked to calculate the percent of variance between what outcomes were desired and what outcomes were found. I'm particularly interested in quality assessment where we get into the percent of variance.

Member of the Audience:

We have just begun using the Joint Commission forms. We have not modified them greatly, except that we learned very quickly that in the outpatient department there are even more exceptions, and it's dealing with these exceptions that becomes critical. To do so you must have an adequate information system. In the outpatient department we had an inadequate information system, but we went to California and we found there a method whereby you do not have to list the exceptions time after time after time. You simply deal with the fact that we're not perfect, and so you decide from the beginning that a certain audit will be acceptable 80% of the time (and that's just an example) the criteria are met. California, unfortunately, has not dealt very much with patient outcomes. They're still dealing with process audits, but they do have one thing down: they've been able to take a large group of physicians and nurses—in a multidisciplinary approach—and come to agreement that there are about six minimal, rather than optimal, criteria, on which one can base assessment. Given the inadequacy of our information system in the ambulatory care area, given the problems that are innate to audit in health care specialties (you have to go to the sophomore medical student to find someone who accepts audit as an educational device), given all these limitations, I think they've really got a handle on something. If you've got an information system, you can get at this and start doing it; and only by doing it are we going to come up with something better. And I'd like to say one more thing: as a physician I'm interested in seeing you base evaluation of your students—both as students and practitioners—on patient care audit rather than multiple-choice questions at the end of your course.

Member of the Audience:

I just want to reinforce what was said earlier about clinical evaluation. When we talk about multiple-choice exams, selecting a, b, c, d, none of the above or all of the above, somehow students don't know which side of the patient to look at for none of the above or all of the above. Really we're not teaching process, we're only teaching recall, and we need to know at what level students are functioning. The kind of multiple-choice questions and the kind of switches that we turn when we examine the patient as a model really don't tell us at what level students are functioning. I was very disappointed when I looked over the content of all of our subject material, that very little was based on the process itself, the manner in which we store information on the problem, in the record. There are techniques that we can communicate, and communication has got to be based on the ways in which we store information, ways in which we can audit it, and ways in which the practicing practitioner gets out and utilizes her education for continuing education. Somewhere in the curriculum this has to be addressed, not merely as something educators are worried about, but as a concern of practitioners—that is, how they will learn, how they will learn from their mistakes, how they can continue learning. I think somewhere along the line the problem-oriented record needs to be added to our curriculum content or some device for storing information as an educational model for practitioners.

INTRODUCTION TO GROUP REPORTS

Curriculum content in any program is based on the role for which the person is being prepared. As the family nurse practitioner role is still in the formative stages, curricula vary considerably. Since faculties from FNP programs had not met together previously, and since the time for meeting was severely limited, the faculty at UNC did some groundwork to facilitate group discussion within the day allotted to discuss curriculum. The UNC faculty developed a proposed curriculum outline[1] for the preparation of a family nurse practitioner to provide primary health care. The UNC faculty recognized that the FNP and primary care may be defined in various ways by educational programs, and that curricula vary depending on the philosophy of the programs. It was felt, however, that definitions of both the FNP and primary care, as well as an outline of one curriculum, would provide a springboard for discussion among participants.

The following operational definition of FNPs as accepted by the UNC faculty was utilized: family nurse pracitioners are registered nurses who have completed a formal program of study which qualifies them to function with a combination of traditional nursing skills, such as counseling and teaching, and newly acquired medical skills, such as diagnosis and treatment. They are prepared to provide primary health care to patients of all ages, chiefly in ambulatory settings, in collaboration with designated physicians who supervise their medical activities within established protocols of care.

The practice of family nurse practitioners is oriented to the needs and concerns of consumers and includes preventive health maintenance as well as medical management. They use knowledge of the complex interplay of health, social, and economic factors to make personal interventions on behalf of patients and families and to use appropriate community agencies. Their concerns extend to the identification of the health needs of the entire community, and they contribute to the development of needed resources and programs.

Primary care was defined as what most people use most of the time for most of their health problems. Primary care is majority care. It describes a range of services adequate for meeting the great majority of daily personal health needs. This majority care includes the need for preventive health maintenance and for the evaluation and management on a continuing basis of general discomfort, early complaints, symptoms, problems, and chronic intractable aspects of disease.[2]

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[1] The original curriculum outline is available from the University of North Carolina upon request.

Curriculum Outline and Rating Scale:

The curriculum content was divided broadly into five categories: adult medicine, pediatrics, obstetrics and gynecology, family and community, and role realignment. Rating scales were designed to ascertain from conference participants their opinion concerning the importance of items included in the proposed curriculum. The first three categories concerning chiefly medical content, did not seem to lend themselves to the same type of rating scale as the last two. Therefore, two different rating scales were designed. Both were concerned with whether or not specific items should be included in the curriculum, but those dealing with medical content also reflected the level at which the graduates of an FNP program would be expected to manage the particular problem concerned. A four-point scale dealing with family-community and role realignment was designed as follows:

Ratings which indicated inclusion in the curriculum:

3-Essential
2-Not essential, possible elective

Ratings which indicated noninclusion:

1-Expected to enter the program with sufficient knowledge
0-Not appropriate, too complex

A fine-point scale dealing with problems encountered in adult medicine, pediatrics, and obstetrics and gynecology was designed as follows:

Ratings which indicate inclusion in curriculum:

4-FNP would manage within prescribed protocols without consulting physician
3-FNP would manage *only* in consultation with the physician
2-FNP would never manage, would always refer to a physician

Ratings which indicate noninclusion in curriculum:

1-FNP expected to enter program with sufficient knowledge and skill
0-Beyond the scope of FNP practice

The curriculum outline and rating scales were sent to those who had committed themselves to coming to the conference, with the request that they be returned for tabulation prior to the time of meeting.

Twenty-one nurse and fourteen physician faculty completed the rating scale. To facilitate group discussion at the conference, the data were organized to show the extent of agreement among nurses and among physicians concerning inclusion of items in the curriculum.

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[2] U.S. Department of Health, Education, and Welfare, Public Health Service, Publication Number 2024: "A Conceptual Model of Organized Primary Care and Comprehensive Community Health Services." 1970.

This was done to enable the groups to spend their allotted time in discussing controversial items.

Conference participants were divided into five groups to deal with the five categories of content. Physicians and nurses were assigned to each group. There was considerable variation in the way in which each group dealt with the subject matter, so that the final rating scales produced by the groups vary in format and meaning. For instance, the ob/gyn group changed the "code-key" slightly. The leader also included a report of a survey done on the opinions of a group of FNPs in active practice to compare with those of faculty. The pediatric group added a dimension to their report by indicating the level of understanding needed for diagnosis and management. The groups discussing family content and role realignment abandoned the scales in their final report. The scale used by each group therefore can be considered only in relation to the report of a particular group. There was agreement among group leaders that, although the model curriculum and rating scale served a purpose in directing participants to consideration of specific content, in future discussions other approaches to deliberation of curriculum content should be considered.

The report of each group was prepared by the group leader. Each leader utilized written records and taped recordings in preparation of the report. The final report, however, represents the leaders' interpretation of the group discussion.

The Editors

REPORT OF THE TASK GROUP ON ADULT MEDICINE

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Participants

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Frank Gluck, M.D. (Vanderbilt)
Robert Hodge, M.D. (Virginia)
Doris Holm, R.N., (UCLA)
Annemarie Juncker, M.D. (Rochester, group leader)
Ruth Ouimette, R.N. (UNC-CH)
Mary Reynolds, R.N. (Western Reserve)
Mildred Roche, R.N. (Maine)
Carrie Schopf, M.D. (Illinois)
Steve Wagner, M.D. (Mountain AHEC)
Mamie Wang, R.N. (Cornell)
Anne Wasson, M.D. (Frontier Nursing Service)

The task set for the group session on Adult Medicine was as follows:

1. to evaluate the coded tables of some 240 disease entities as worked on by the conference participants prior to attending;
2. to delineate and clarify the areas where either nurses or physicians in their peer group or one group versus the other showed disagreement in how a certain disease entity should be handled by the nurse-physician team;
3. to list our agreed-upon conclusions in such a way that they might be translated into priorities of curriculum content at a later date.

Summary of the Group Discussion

All group members had familiarized themselves with the questionnaire prior to coming to the conference.

All group members had personal experience of working as or with the NP in primary care settings. Seven members were physicians, five were nurses.

The group started the discussion by voicing and clarifying certain basic hesitations one might have as to the value of the task set before us.

In certain areas of practice it seemed almost impossible to identify common requirements of knowledge and skills when nurses are being prepared for tasks as wide apart as working alongside physicians in an urban multispecialty health center or delivering geographically isolated primary care in the Kentucky mountains. Several participants from programs with graduates almost exclusively in urban settings stressed the need for in-depth education in certain tracks of medicine. This would enable the nurse to take care independently of a larger group of patients presenting with frequently occurring problems such as hypertension, diabetes, etc. For disease entities outside the area of expertise, consultation would be readily available. The nurse working in a rural area however, will need experience in all tracks of medicine and all emergency procedures, if necessary at the cost of depth in areas less apt to present with urgent need for intervention.

The group members agreed that in spite of significant differences in team-practice settings and modalities, it would be of value to identify core requirements of common basic knowledge and skills for a nurse practitioner. This would seem especially important as nurse practitioners are moving nationwide, often seeking employment far away and in settings different from their immediate area of education. The group also stressed that while agreeing on basic expectations, nurses with additional education and experience in certain areas might work more independently in their specialty field. Our code should not be regarded as a protocol restricting the nurse to a certain behavior inside the nurse-physician team. No such rule should ever be imposed for all settings and time periods. Reference was made to a previous speaker's remarks on protocols: he stated that the greatest value of protocols was to the care providers who developed them for their own individual setting and who were ready to update them at least every 6 months.

Identifying basic requirements would also seem timely as national certification for nurse practitioners is being developed. The problem of national certification was touched on in our discussion as it relates to the task given to us. Our difficulty in identifying basic core knowledge and skills to be required of all FNPs would make a national NP exam for practice equally problematic. In spite of anticipated difficulties, the group strongly welcomed national certification, but stressed that it should be for excellence and that it should not be task oriented. The nurse, in contrast to the PA, should be evaluated for her/his problem-solving approach. All participants stressed strongly that any task such as ours or such as developing national certification for the nurse practitioner should only be worked out in a forum similar to ours, that is, made up of interdisciplinary NP faculty of physicians and nurses.

Several of the physicians had strong objections to using a list of diseases in order to clarify curriculum content for FNPs. Their objections stemmed from their experience with medical school curricula, where the disease-oriented approach has proven detrimental in many ways. They encouraged NP faculty to learn from the medical school experience and stay away from a task-and disease-oriented approach from the start. Nurses should be taught a problem-solving approach and learn where to go for more information. Our coded list of some 240 items should by no means be a blueprint for the type of lectures to be given in a nurse practitioner curriculum. Nearly all participants stressed the need for more pathophysiology in the average NP curriculum. One participant pointed out that in school the student will be exposed to a certain number of disorders but will learn basically how to care for most of them only after having first been exposed to them during clinical experience.

The group came to the conclusion that in spite of all objections raised, the coded list would be a useful tool, not so much as a curriculum outline, but for evaluating our programs.

The next point of discussion had to do with the coding system as it was given to us. It was felt that disagreements in coding disease entities stemmed more from different interpretations of the codes than from actual differences in approaching a certain problem situation.

Most of the 6 hours of our workshop were then spent in very practical and worthwhile discussions on how a patient presenting with a certain problem might best be approached by a nurse-physician team. It became obvious in our discussion that concern for good care was the guiding factor in trying to define role assignment for nurses and physicians alike. The discussion turned into a fruitful time of sharing about very practical problems in primary care.

In the first group of disease entities on our list, the eyes, ears, nose and throat diseases, some disagreement of approach seemed to stem from different practice settings and varying availability of specialist consultation. This would account for differences in coding between numbers 4 and 3. The differences between codes 3 and 2 were related to code definitions. In several disease entities, such as iritis or glaucoma, recognition seemed most important, but in its full differential diagnosis beyond the responsibility of the NP or the physician primary care provider. Guidelines for the NP might use a symptom-oriented approach, e.g., the painful eye should always be referred to the appropriate physician provider. The nurse would, according to code 2, have basic knowledge of some diseases this might represent, but would not have to make the diagnosis on her own. A simple guide, valid for physician as well as nurse practitioner, would read that anything that does not look right should be referred, code 2. This suggestion was made in regard to mouth lesions, but it was felt to be acceptable for many other not readily diagnosable abnormalities. A physician mentioned the trend in medical schools to include more EENT into their curriculum and urged NP faculty to also give this area serious consideration and weight.

In the field of cardiovascular disease it was pointed out that differential diagnosis of valvular heart disease and diagnosis of ECG tracings, if included, should not have priority at the expense of other more urgent problems in the curriculum of the generalist NP.

On the issue of management of hypertension, no agreement was reached as to whether the nurse should be handling the hypertensive patient without individual physician input, as was done in several recently published studies. However, for curriculum content it did not seem vital to decide how independently the nurse would work. It was unanimously agreed that pathophysiology of hypertension and management and knowledge of the drugs used belonged in the curriculum with considerable weight.

Oncological problems in different organ systems had been coded as 2 by many participants. In an effort to stress the important supportive role of the nurse with the terminally ill patient, we decided to code with 3 the malignant lesions and other terminal diseases such as chronic renal failure.

We also coded as 3 all true medical emergencies, e.g., cardiac arrest, acute severe attack of asthma. The nurse would simultaneously summon help and institute initial medical intervention.

A last area of disease entities which prompted an extended discussion were behavior and psychological disorders of short duration, and marital disorders. The nurses seemed to clearly want physician consultation, while the physicians assumed that the nurse would bring an adequate educational background to deal independently with psychosocial problems of the patients.

This brought our discussion to a last point. The long list of almost exclusively medical problems turned out to be coded mainly as 4 and 3 requiring significant understanding of the conditions listed. This seemed an overwhelming amount of content to be stuffed into the short time available to most programs. We felt a need but lacked the time to translate our findings into priorities for curriculum content. While our group had dealt almost entirely with the medical aspects of patients' problems, we wanted to stress the importance of the nurse's background education in psychosocial aspects and human development. Our discussion hardly touched on this aspect, because we assumed it was adequately dealt with in other groups, especially the ones on "Role Change" and "Family."

The discussion ended on a note of appreciation for having had this chance of interdisciplinary and nationwide sharing and exchange of experience and thought. The firm hope was expressed that similar conferences might be made possible again in the future to continue the work that has been started.

Summary

The task group on Adult Medicine spent most of their 6-hour's work in practical discussions on how the main patient problems presenting in primary care should best be handled by a nurse-physician team approach.

It was clearly stated that our coded list should not be a blueprint for a nurse practitioner teaching curriculum, but might be useful in evaluating the excellence of a nurse practitioner program. Nurse practitioner programs should use a problem-solving approach in teaching, not the disease-oriented approach as might be suggested by our coded list.

Great difficulties were encountered in defining common approaches to disease in very different practice settings such as rural and urban. The group agreed on the value of identifying basic core knowledge and skills which should be taught in every NP program. However it was stressed that the coded list in the table (see table 3 at the end of this discussion) should not restrict the nurse to a protocol or rule for all practice situations. Individual practitioners should always be free to take more independent responsibility in areas where they have acquired additional experience and expertise.

To educate the nurse so that she might function as outlined in our coded list will require teaching an overwhelming amount of material in the short time available to most programs.

The group expressed the hope for further similar working sessions to translate the material into priorities for curriculum and to discuss new approaches of how it might be taught.

All group participants agreed that education of the nurse practitioner in pyschosocial aspects of disease, in human development and behavior and family interaction was of great importance, even though it was only marginally touched in our discussion. Many codes 3, meaning important management input by the nurse, were assigned to chronic disease and terminal illness, thus expressing the group's expectations of a true team approach by the nurse and the physician.

We also categorized each item using a matrix designed to describe the depth of knowledge regarding pathophysiology or psychodynamics required in the diagnosis and management of each condition. This categorizing scale and matrix can be pictured in this way:

	Significant pathophysiology/psychodynamics	Limited pathophysiology/psychodynamics
Diagnosis		
Management		

Limited knowledge for diagnosis was chosen (by giving a value of 0) in those conditions in which in-depth knowledge of psychodynamics or pathophysiology is not necessary to make an appropriate diagnosis. Significant knowledge was chosen (by giving a value of 1) when significant knowledge of basic disease mechanisms is required to make an appropriate diagnosis and/or differential.

The value of 0 for management was given when there would be the need for only limited management by the nurse practitioner. In these circumstances the nurse practitioner would choose management based on clear-cut established guidelines or protocols in regard to which there are limited concerns about side effects or complications. If the problem were an emotional one, the management would be based on a superficial knowledge of theory or on general knowledge of human behavior and interaction.

Table 3.—Content rating list of the task group on adult medicine

	Rating scale[1]				
	4	3	2	1	0
DISEASES, BY ORGAN SYSTEM, IN CHILDREN AND ADULTS: EYE, NOSE, AND THROAT					
Eye					
Infections					
Conjunctivitis	X				
Hordeoleum	X				
Iritis			X		
Trauma					
Corneal abrasion			X		
Foreign body embedded			X		
Blowout fracture of orbit			X		

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[1] Rating key:
Ratings which indicate inclusion in curriculum:
4—FNP would manage within prescribed protocols without consulting physician
3—FNP would manage *only* in consultation with physician
2—FNP would never manage, would always refer to physician
Ratings which indicate noninclusion in curriculum:
1—FNP expected to enter program with sufficient knowledge and skill
0—Beyond the scope of FNP practice

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale 4	3	2	1	0
Other					
Glaucoma, acute			X		
Glaucoma, chronic		X			
Refractive errors			X		
Cataract			X		
Pterygium if symptomatic			X		
Ear					
Otitis externa	X				
Tympanic membrane					
Myringitis	X				
Perforation		X			
Otitis Media					
Acute suppurative	X				
Acute	X				
Recurrent		X			
Serous	X				
Labyrinthitis		X			
Mastoiditis			X		
Other - impacted cerumen	X				
Cholesteatoma			X		
Hearing loss			X		
Tinnitus	X				
Nose					
Sinusitis	X				
Epistaxis	X				
Foreign body embedded			X		
Allergic rhinitis	X				
Polyps, without symptoms		X			
Polyps, with symptoms			X		
Mouth					
Oral Lesions					
Thrush	X				
Herpes gingivostomatitis	X				
Leukoplakia and oral lesions			X		
Caries			X		
THROAT AND RESPIRATORY TRACT DISEASE					
Infectious Diseases					
URI	X				
Pharyngitis-tonsilitis	X				
Epiglotitis			X		
Lymphadenopathy without easily identifiable cases		X			
Croup		X			
Bronchiolitis		X			

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale				
	4	3	2	1	0
Laryngo-tracheo-bronchitis		X			
Acute bronchitis	X				
Broncho pneumonia		X			
Lobar pneumonia		X			
T.B.		X			
Chronic					
Asthma		X			
Cystic fibrosis		X			
COPD		X			
Other					
Lung Ca		X[2]	X		
Pulmonary emboli			X		
Pleural effusion			X		
Foreign body			X		
Chemical pneumonia			X		
Aspiration pneumonia			X		
Acute asthma attack		X			
Other - "Emergency measures for above"		X			
Emergencies					
Status asthmaticus		X			
Pneumothorax					
Spontaneous			X		
Traumatic			X		
Respiratory insufficiency, failure			X		
Anaphylaxic		X			
CARDIOVASCULAR DISEASE					
Congenital lesions		X			
Rheumatic fever & RH disease		X			
Other acquired valvular diseases		X			
Functional murmurs		X			
Arrhythmias		X			
Arteriosclerotic cardiovascular disease					
Angina pectoric		X			
Myocardial infarction		X			
Intermediate angina syndromes		X			
Hypertension		X			
Congestive heart failure					
Left ventricular failure		X			
Right ventricular failure		X			

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[2] Either 3 or 2 depending on stage of illness, i.e., newly detected versus stabilized management.

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale 4	3	2	1	0
Peripheral vascular disease					
Occlusive arterial disease		X			
Venous disease					
Acute thrombophlebitis		X			
Chronic venous insufficiency		X			
GI DISEASES					
Diseases of the esophagus					
Esophagitis		X			
Dysphagia and heartburn		X			
Ca		X			
Motor disturbances					
Achalasia		X			
Diffuse esophageal spasm		X			
Globus hystericus		X			
Other - Esophageal varices		X			
Esophageal diverticulum		X			
Diseases of stomach					
Acid peptic disease		X			
Hiatal hernia		X			
Gastric Ca		X			
Gastroenteritis		X			
Other - Alcoholic gastritis		X			
Diseases of the bowel					
Small bowel disease					
Malabsorption disease		X			
Regional enteritis		X			
Large bowel disease					
Diverticulosis, diverticulitis		X			
Ca of colon		X[2]	X		
Ulcerative colitis		X			
External hemorrhoids without bleeding	X				
Rectal bleeding		X			
Obstruction					
Intussusception			X		
Hirschsprung's disease			X		
Megacolon			X		
Constipation	X				
Diarrhea	X				
Common parasites	X				
Other - "Recurrent constipation, diarrhea, or parasites"		X			
Diseases of pancreas-pancreatitis		X			

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale				
	4	3	2	1	0
Diseases of gall bladder		X			
Diseases of liver		X			
Functional GI diseases					
Aerophagia—distention		X			
Irritable bowel syndrome		X			
Abdominal masses					
Umbilical hernia			X		
Granuloma			X		
Omphalitis			X		
Wilms tumor			X		
Neuroblastoma			X		
Ovarian tumor			X		
Hernia			X		
Emergencies					
Acute abdomen					
Appendicitis		X			
Peritonitis		X			
Perforated viscus		X			
Dehydration		X			
GI hemorrhage					
Upper GI		X			
Lower GI		X			
Other - "Penetrating wounds"		X			
"Blunt trauma"		X			
GU DISEASES					
Conditions affecting bladder, urethra					
First cystitis, female	X				
Pyuria, male		X			
Other - Asymptomatic hematuria			X		
Prostate and scrotum					
Prostatitis		X			
BPH		X			
Ca of prostate		X			
Undescended testes			X		
Testicular torsion			X		
Epididymitis		X			
Hydrocele		X			
Other - testicular nodule			X		
Kidney					
Nephritis			X		
Nephrosis			X		
Pyleonephritis		X			

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale				
	4	3	2	1	0
Acute glomerulonephritis			X		
Kidney stones		X			
Renal failure, acute			X		
Renal failure, chronic		X			
Obstruction			X		
Venereal disease					
Gonorrhea	X				
Syphilis		X			
Other					
Adult enuresis		X			
Urinary retention		X			
BLOOD DISEASES					
Iron deficiency anemia		X			
Pernicious anemia		X			
Sickle cell anemia and disease		X			
Hemolytic anemia			X		
Leukemia			X		
Lymphoma			X		
METABOLIC ENDOCRINE DISORDERS					
Diabetes mellitus		X			
Thyroid diseases					
Hyperthyroidism		X			
Hypothyroidism		X			
Obesity	X				
Hyperlipidemia		X			
NEUROLOGICAL PROBLEMS					
Signs and symptoms					
Headache					
Migraine		X			
Chronic tension	X				
Fainting		X			
Seizures		X			
Coma		X			
Neuropathy		X			
Paralysis		X			
Diseases					
Vascular					
TIA		X			
Cerebral thrombosis		X			
Cerebral hemorrhage		X			
Subarchnoid hemorrhage		X			

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale				
	4	3	2	1	0
Organic brain syndrome		X			
Congenital					
Cerebral palsy		X			
Retardation		X			
Meningitis			X		
Subdural and epidural hematoma			X		
Parkinsonism		X			
Disc syndromes					
Cervical		X			
Lumbar		X			
Low back pain		X			
MUSCULOSKELETAL DISORDERS					
Torticollis		X			
Arthritis					
Rheumatoid arthritis		X			
Osteoarthritis		X			
Pyogenic arthritis			X		
Gout		X			
Costro-condritis		X			
Muscle and tendon disorders		X			
Congenital deformities		X			
Trauma					
Strains		X			
Sprains		X			
Fractures		X			
Dislocations		X			
SKIN DISEASES					
Dermatitis					
Contact	X				
Poison ivy and oak	X				
Eczema		X			
Acne	X				
Cancer			X		
Drug reactions		X			
Corns and callouses	X				
Scabies	X				
Pediculosis	X				
Warts	X				
Paronychia		X			
Seborrhea	X				
Psoriasis		X			
Impetigo	X				

Table 3.—Content rating list of the task group on adult medicine—continued

	Rating scale				
	4	3	2	1	0
Monilial	X				
Tinea versicolor	X				
Tinea circinata	X				
Herpes zoster		X			
Tinea cruris	X				
Pitariasis rosea	X				
Tinea pedis	X				
BEHAVIORAL AND PSYCHOLOGICAL DISORDERS					
Minimal brain dysfunction		X			
Hyperactivity		X			
Depression		X			
Anxiety		X			
Alcoholism		X			
Drug abuse		X			
Marital problems		X			
Psychosis		X			
Neurosis		X			
Psychopharmocology		X			
TRAUMA AND SURGICAL EMERGENCIES					
Minor lacerations	X				
Minor burns	X				
Stings and bites	X				
Soft tissue infections		X			
Foreign bodies, minor	X				
Foreign bodies, major		X			
Injury			X		
Exposure to					
Cold		X			
Heat		X			
Readiation		X			
Electrical injuries			X		
Near drowning			X		
MEDICAL EMERGENCIES					
Cardiac arrest		X			
Shock		X			
Coma and unconscious states		X			
Acute alcoholism		X			
Drug withdrawal		X			
Ingestions		X			

THE CHILD HEALTH CURRICULUM

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The child health work group attempted to select from the general curriculum list those topics dealing with health maintenance and illness management which were pertinent to children. The group then attempted to categorize these topics on the basis of their importance to the practicing nurse practitioner and the depth of knowledge that was needed about the diagnosis and management of each condition. To do this we used the suggested scale and took into account the ratings given each topic prior to the conference by those participants who had completed the rating scale. This rating scale was similar to that used by other groups and has already been described. We did modify the definition of the second alternative (superficial knowledge: would always refer to a physician). When we classified an item as 2, we meant that the family nurse practitioner would be expected to have adequate knowledge regarding both recognition and management of the condition so that the patient would always be referred to a physician or other professional for confirmation of diagnosis and management.

Significant knowledge of pathophysiology or psychodynamics (indicated by assigning a value of 1) was chosen in cases where management is based on knowledge of the interaction of disease and therapy, and when therapy has to be adapted frequently in response to changes in status. A value of 1 was also chosen if management needs to be based on a specific knowledge of growth and development or behavior, or if therapy must respond appropriately to many varied situations.

The child health group believed this matrix was helpful in clarifying the type and depth of instruction required in each area, and would emphasize that the needed knowledge of pathophysiology or psychodynamics might be conveyed in a short period of time. There is not an implication that an item with a rating of 1 for both diagnosis and treatment requires extended discussion, only that the needed and known information should be conveyed.

The conditions that we rated and how we rated them (table 4) are listed at the end of this discussion.

After the group had reviewed and rated the individual items we attempted to summarize some of our overall views concerning curriculum. There were several views on which there was reasonable consensus and which we would like to share.

1. The child health group assumed that an essential part of the core curriculum would involve the learning of basic skills of history-taking and physical diagnosis. We emphasize here the need to include instruction in the unique aspects of pediatric history-taking and physical assessment. It is also important that certain diagnostic and therapeutic techniques, such as behavior modification be taught as part of the course.

2. We emphasize the need for clinical experience throughout the didactic portion of the course. Reliance upon lectures, without simultaneously exposing the student to appropriate clinical experience, is full of pitfalls. The clinical experience is important in reinforcing the effect of the lecture material and should aid in retention of clinically important information. There should be continuous evaluation of the clinical abilities of nurse practitioners, as well as of their factual knowledge.

3. Our group, like all the other groups, found if difficult to limit our discussion of curriculum to the child health section alone. There is a need for all five groups to meet together and develop a cohesive total program. There were many in our group who felt there was insufficient attention to psychosocial factors in the child health curriculum. Our group assumed that the group discussing the needs of the family addressed many of these issues, but we could not be sure of this and were concerned about it. This type of concern could be addressed only by putting all the parts of the curriculum together. This process would undoubtedly lead to still further discussion of the relative importance of various items. There was substantial disagreement in our group about how long it would take to reach these

curriculum goals. It would be harder still to agree on the allocation of time if all five groups were meeting together, because such issues as the relative importance of well child care and care of the chronically ill adult would surely emerge. No matter how long the total program, questions of priority will emerge. Such a discussion of a comprehensive curriculum by the whole group would not be an easy one, but it is a necessary step to take.

4. There emerged in many of our discussions real sectional differences in emphasis between programs serving more urban, sophisticated areas and those serving more rural, less resource-rich areas. This was particularly clear in striking a balance between well child care and counseling, and sick child care. Programs serving poorer, rural areas tended to emphasize meeting the illness needs of medically underserved populations. Programs from urban areas placed much more emphasis on well child care and behavioral counseling.

There also were sectional differences in the "commonness" of common complaints. Certain childhood diseases tend to be more prevalent in certain geographic areas. Further there were differences in subject matter based on the socioeconomic or ethnic background of the population to be served.

Our group drew two conclusions from our recognition of these differences. First, the search for a common core was both desirable and possible, but not always easy. The second was that a great deal of flexibility is required to meet regional and local needs. There should also be opportunity for nurse practitioners who move to a new section to have access to programs of continuing education which prepare the nurse practitioner to meet local needs.

5. The rating of individual items is based on the amount of knowledge which we felt a nurse practitioner should have after the completion of the preceptor period. We believed a graduate at that point should be able to completely perform what we outlined. Time alone will tell if the nurse practitioner can maintain these skills in the variety of settings in which the nurse practitioner is found. Certainly the more highly specialized settings or those with a restricted patient population will test the ability of the FNP to maintain these broadly based skills.

6. The standards described have assumed there will be a continuing line of communication between the nurse practitioner and physician, and that this will be a mutual learning experience.

7. There is a tremendous need for organizing a meaningful continuing education program, and this must include self-education. Our group really wondered if our programs encourage self-education. We were concerned that there is so much emphasis on teaching a large mass of material in a short period that self-learning skills are not

developed. Our programs may be counterproductive in this regard, as we hand out more and more materials prepared in various formats for the student to absorb, with little attention to their ability to find information for themselves.

The main suggestion from the child health group was that another meeting be held during 1976-77. We had a long discussion about whether the FNPs should meet separately or together with other nurse practitioners. We believed that FNPs have unique problems particularly in the areas of curriculum, and they need to meet and discuss those problems. We also believed that there are certain problems common to all nurse practitioners. These tend to be practical problems like salary, accreditation, and relationship to physicians. We suggested a joint meeting, but a joint meeting at which part of the time is assigned to family nurse practitioners and part to pediatric nurse practitioners to discuss their unique problems. This was our compromise solution to what we felt was a real need for both combined and separate meetings. We knew as a group that family nurse practitioners have got to deal with their problems, and they cannot just take the entire curriculum for child health from pediatric nurse practitioners. The FNP curriculum needs to meet a unique set of needs.

Table 4.—Content rating list on pediatrics

	Level of understanding[1]		
	Classification	Diagnosis	Management
WELL CHILD CARE AND SUPERVISION			
Growth and development			
Physical growth			
Normal growth patterns (including head)	4	1	1
Abnormal patterns	3	1	0
Psychosocial development—stages	4	1	1
Genetics	3	1	1
Positive health maintenance			
Immunizations	4		1
Prevention and anticipatory guidance			
Speech	4	1	0
Hearing	4	1	0
Vision	4	1	0
Dental	4	1	0
Developmental screening	4	1	1
Child abuse and parenting	4	1	1
Accident prevention	4	1	1
Nutrition and feeding	4	1	1
Environmental stimulation and play	4	1	1
Sex education	4	1	1
Discipline	4	1	1
Elimination	4	1	1
School and day care	4	1	1
Sleep	4	1	1
CHILDHOOD HEALTH PROBLEMS			
General principles of management			
Approach to the sick child			
Activity	4	1	1
Diet	4	1	1
Medications and oral fluids	4	1	1
Followup	4	1	1
Compliance	4	1	1
Fever	4	1	1
Approach to the child with chornic illness	3	1	1
Approach to the handicapped child	3	1	1

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[1] The first column "Classification" represents the scale. Ratings which indicate inclusion in curriculum are:
4—FNP would manage within prescribed protocols without consulting physician
3—FNP would manage *only* in consultation with the physician
2—FNP would never manage, would always refer to physician
Ratings which indicate noninclusion in curriculum are:
1—FNP expected to enter program with sufficient knowledge and skil
0—Beyond the scope of FNP practice
The second and third columns "Diagnosis" and "Management" represent:
0—Limited knowledge
1—Significant knowledge

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Systemic infections			
Viral syndromes (uncomplicated)			
Measles	4	1	1
Rubella	4	1	1
Mumps	4	1	1
Roseola	4	1	1
Varicella	4	1	1
Fifth's disease	4	1	1
Infectious mono	4	1	1
Other viral syndromes	4	1	1
Polio	2	1	0
Rickettsial diseases (RMSF)	2	1	0
Bacterial diseases			
Scarlet fever	4	1	1
Pertussis	2	1	0
Diphtheria	2	1	0
Tetanus	2	1	0
DISEASES, BY ORGAN SYSTEM: EYE, NOSE, AND THROAT			
Eye			
Infections			
Conjunctivitis and blepharitis	4	1	1
Sty	4	1	1
Iritis	2	0	0
Trauma			
Corneal abrasion	3	1	1
Foreign body	3	1	0
Other			
Glaucoma	2	0	1
Refractive errors	2	1	0
Cataract	2	1	0
Strabismus	3	1	0
Amblyopia	2	1	0
Retinoblastoma	2	0	0
Blindness	2	0	0
Obstructed tear duct	3	1	0
Ear			
Otitis externa	4	1	1
Tympanic membrane			
Myringitis	4	1	1
Perforation—acute	4	1	1
Perforation—chronic	2	1	1
Otitis media			
Acute suppurative	4	1	1
Chronic	3	1	1
Serous—acute	4	1	1

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Mastoiditis	2	1	0
Hearing loss	3	1	0
Foreign body—uncomplicated	4	1	1
Nose			
Sinusitis			
Nonbacterial	4	1	1
Bacterial	3	1	1
Epistaxis	4	1	1
Foreign body	4	1	1
Allergic rhinitis	4	1	1
Polyps	2	0	0
Mouth			
Oral lesions			
Thrush	4	1	1
Gingivostomatitis	4	1	1
Caries	2	0	0
Gum disease	2	0	0
THROAT AND RESPIRATORY TRACT DISEASE			
Infectious diseases			
URI	4	1	1
Pharyngitis-tonsilitis	4	1	1
Epiglotitis	2	1	0
Primary lymphadenitis	3	1	1
Bronchiolitis	3	1	1
Laryngotracheobronchitis	3	1	1
Acute bronchitis	4	1	1
Pneumonia	3	1	1
T.B.	3	1	1
Influenze	4	1	1
Recurrent respiratory disease	3	1	1
Chronic			
Asthma			
Uncomplicated	4	1	1
Complicated	3	1	1
Cystic fibrosis	3	1	1
Other			
Pleural effusion	2	1	0
Foreign body	2	1	0
Chemical pneumonia	2	1	0
Aspiration pneumonia	2	1	0
Emergencies			
Pneumothorax			
Spontaneous	3	1	1
Traumatic	3	1	1

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Respiratory insufficiency, failure	3	1	1
Anaphylaxis	3	1	1
CARDIOVASCULAR DISEASE			
Congenital lesions	3	1	1
Acute rheumatic fever	2	1	1
RH disease	3	1	1
Functional murmurs	4	1	1
Arrhythmias	2	1	0
Hypertension	3	1	1
Congestive heart failure - pediatric	2	1	0
Myocarditis	2	1	0
GI DISEASES			
Diseases of the esophagus			
Motor disturbances			
Achalasia	4	1	1
Diseases of the stomach			
Acid peptic disease	3	1	1
Gastroenteritis	4	1	1
Colic	4	1	1
Diseases of the Bowel			
Small bowel disease			
Malabsorption disease	3	1	1
Regional enteritis	3	1	1
Pyloric stenois	2	1	0
Large bowel disease			
Ulcerative colitis	3	1	1
Hemorrhoids	4	1	1
Intussuception	2	1	0
Hirschsprung's disease	2	1	1
Functional megacolon	3	1	1
Constipation	4	1	1
Diarrhea	4	1	1
Uncomplicated	4	1	1
Complicated	2	1	0
Anal fissure	4	1	1
Nonemergency GI bleeding	3	1	1
Diseases of the liver			
Hepatitis	3	1	1
Neonatal jaundice	3	1	1

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Functional GI diseases			
Obesity and overeating	4	1	1
Nonspecific abdominal pain	4	1	1
Abdominal masses			
Umbilical hernia	4	1	1
Granuloma	4	1	1
Omphalitis	2	1	1
Abdominal tumors	2	1	0
Hernia—inguinal	2	1	0
Emergencies			
Acute abdomen			
Appendicitis	2	1	0
Peritonitis	2	1	0
Perforated viscus	2	1	0
Dehydration	3	1	1
GI Hemorrhage—major			
Upper GI	2	1	0
Lower GI	2	1	0
GU DISEASES			
Conditions affecting the bladder, uretha			
Cystitis	3	1	1
Urethritis	3	1	1
Phimosis	2	1	0
Prostate and scrotom			
Undescended testes	2	1	0
Testicular torsion	2	1	0
Epididymitis	2	1	0
Hydrocele	3	1	1
Kidney			
Nephritis and nephrosis			
Nephritic syndrome	3	1	1
Chronic nephropathy	3	1	1
Pylenephritis	3	1	1
Acute glomerulonephritis	3	1	1
Kidney stones and obstruction	2	1	0
Renal failure			
Acute	2	1	0
Chronic	3	1	0
Idiopathic proteinuria	3	1	1
Idiopathic hematuria	3	1	1
Venereal Disease			
Gonorrhea			
Extragenital	3	1	1
Genital—uncomplicated	4	1	1

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Syphilis	4	1	1
Congenital syphilis	2	1	1
Other			
Enuresis	4	1	1
Urinary retention	2	1	0
BLOOD DISEASES			
Iron deficiency anemia	4	1	1
Sickle cell anemia and disease	3	1	1
Hemolytic anemia	2	1	0
Lymphoma and leukemia	2	1	0
METABOLIC-ENDOCRINE DISORDERS			
Diabetes mellitus			
Stable—uncomplicated	3	1	1
Complicated	2	1	1
Thyroid diseases—hypo and hyper	3	1	1
NEUROLOGICAL PROBLEMS			
Signs and symptoms			
Headache	3	1	1
Fainting	3	1	1
Seizures, including febrile	3	1	1
Neuropathy	2	1	0
Acute paralysis	2	1	0
Cerebellar ataxia	2	1	1
Diseases			
Vascular			
Subarachnoid hemorrhage	2	1	0
Congenital			
Cerebral palsy	3	1	1
Retardation	3	1	1
Meningitis	2	1	0
Subdural and epidural hematoma	2	1	0
MUSCULOSKELETAL DISORDERS			
Torticollis	4	1	1
Arthritis			
Rheumatoid arthritis	3	1	1
Pyogenic arthritis	2	1	0
Congenital deformities			
Congenital hip	3	1	1

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Trauma			
Strains	4	1	1
Sprains	3	1	1
Fractures	2	1	0
Dislocations	2	1	0
Scoliosis	3	1	1
SKIN DISEASES			
Dermatitis			
Contact	4	1	1
Poison ivy and oak	4	1	1
Eczema	3	1	1
Acne	4	1	1
Drug reactions	3	1	1
Scabies	4	1	1
Pediculosis	4	1	1
Warts	4	1	1
Paronychia	4	1	1
Seborrhea	4	1	1
Psoriasis	2	1	1
Impetigo	4	1	1
Monilial (skin)	4	1	1
Tinea versicolor	4	1	1
Tinea circinata	4	1	1
Tinea cruris	4	1	1
Pitariasis rosea	4	1	1
Tinea pedis	4	1	1
BEHAVIORAL AND PSYCHOLOGICAL DISORDERS			
Learning disorders	3	1	1
Minimal brain dysfunction	3	1	1
Autism	2	1	0
Hyperactivity	3	1	1
Depression	3	1	1
Anxiety	3	1	1
Alcoholism	3	1	1
Drug abuse	3	1	1
Psychosis	2	1	0
Neurosis	3	1	1
Age specific disorders	3	1	1
TRAUMA AND SURGICAL PROCEDURES			
Minor lacerations	4	1	1
Minor burns	4	1	1

Table 4.—Content rating list on pediatrics—continued

	Level of understanding		
	Classification	Diagnosis	Management
Stings and bites			
Nonpoisonous	4	1	1
Poisonous	3	1	1
Soft tissue infections	4	1	1
Foreign bodies (soft tissue)	3	1	1
Exposure to[2]			
Cold	3	1	1
Heat			
Mild	3	1	1
Stroke	2	1	0
Radiation	3	1	1
Electrical injuries	2	0	0
Near drowning	2	1	0
MEDICAL EMERGENCIES			
Cardiac arrest	2	1	1
Shock	2	1	1
Coma and unconscious states	2	1	1

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[2] Since the group did not have time to rate all content, the reamining items were rated by the group leader, with consultation from faculty of the UNC-Chapel Hill Family Nurse Practitioner Program.

DETERMINANTS OF OB/GYN CURRICULUM IN NURSE PRACTITIONER TRAINING

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Introduction

There are inherent in the discussion of nurse practitioner curricula many programmatic parameters other than mere content and syllabus. Issues such as concomitant clinical experiences, definition of the product, and even educational philosophy constantly enter into the dialogue. Thus, it is most difficult to identify and select specific content areas which belong in *every* training course for all nurse practitioners.

This is particularly true in a speciality area such as obstetrics-gynecology, which has not only a rather discrete body of knowledge but also peculiar practicum needs. Nonetheless, if we are, as we claim, preparing similar products with like skills and parallel functions, then it is essential that their academic exposure and assimilation of a sound theoretical framework have a broad common base. The determination of that commonality does not come easy. It takes a process of consensus, I believe, of both academicians and practitioners which is tedious to develop.

Curriculum Survey Methodology

Therefore, prior to the OB/Gyn group's work sessions at the national conference, certain preliminaries were accomplished in order to facilitate the process of curriculum definition. In addition to the rating scales culled by questionnaire from the physician and nurse faculty, a survey of a group of FNPs in North Carolina was also made. Only the reaction to OB/Gyn curriculum was sought. Subjects were selected from a mailing list of all graduates of the University of North Carolina, Chapel Hill FNP Program from its inception in 1970. The sole criterion for inclusion was the length of time in practice—that is, more than 18 months. Practice sites, it turned out, were quite diverse.

The identical content rating instrument was sent to the FNPs as was sent to the program faculties with the explanatory hierarchical code and a cover letter that described the use to which the collected data would be put. Of the 44 FNPs who were surveyed, there were 22 respondents, or a return of 50 percent. Results of the compilation of the returns were a bit surprising.

Results

One might have hypothesized, as I did, that the practitioners themselves would tend to be a bit more conservative in their assigning a level of importance to curriculum topics than the nursing-physician faculty. Moreoever, the everyday experiences of the nitty gritty of practice in a wide spectrum of agencies and sites would certainly seem to be contributory to their perception of the proper placement of specific theoretical items in a course syllabus. Their view would be more practical than esoteric or academic. This indeed seems to be true; the results, however, appear to show that the FNPs are doing more perhaps than we who teach them generally expected them to do (see table 5). They tended to rate themselves higher (that is, capable of accepting more responsibility and more complete management in Ob/Gyn patient care) than either their physician or nurse counterparts did. Categorization was also more explicit; there were fewer shadow areas.

On comparing the three groups, a few seemingly consistent differences were found in their rating categorizations. The nurse faculty put more items in the "2" or "3" slots (areas that cannot be managed collaboratively, but rather referred or in direct consultation with the physician). The next group, that of the physicians, seemed a bit more liberal in their perceptions, and the third group—the FNPs—were the consistently higher raters.

The fact that the FNP group appeared to be more decisive in their ratings was further supported by the fact that there were fewer items on which the FNPs could not reach either high or substantial agreement. It, too, was indeed interesting to observe that about 20% of both the FNP sample and the nurse faculty sample felt that such conditions as menopause, menarche, and the facets of patient education in both the prenatal and postpartum period were perhaps unnecessary for an extended role curriculum since they belonged in the body of generic nursing knowledge (rated 1). The physicians did not acknowledge this. Moreover, approximately 5 to 6 percent of both of the nurse groups felt that there were indeed items beyond the scope of practice (rated 0), such as management of carcinoma of the breast, toxemia, psychiatric changes of pregnancy, pelvic inflammatory disease, and delayed postpartum hemorrhage. The physician sample, however, rated no entities in either of the categories of beyond the scope of FNPs' anticipated practice (0) or previous sufficient nursing knowledge (1). With a quasi-vacuum evident at both ends of the spectrum it would be amusing to speculate on the physician group perceptions of traditional versus extended nursing practice.

There seemed to be little misinterpretation of the rating process by the sample groups, since there was very little narrative qualification to any of their responses. Comments indeed were kept to a very bare minimum.

In assessing the intergroup degree of disagreement, the problem areas became clearly delineated. Of the 80 items, 32 certainly appeared to need clarification before they could be coded. These items, listed in table 5, are identified by asterisks. The results of the rating process were returned to the faculty members of the participating programs prior to the conference so that they might be perused before the group sessions.

Ob/Gyn Conference Group Composition

The Ob/Gyn curriculum group consisted of 12 members, 7 of whom were nurses—including 2 midwives—and 5 of whom were physicians. They represented a geographic spread from California to New Orleans, and of the 10 programs represented, 8 were in a comparatively rural setting, while 2, 1 in Richmond, Virginia, and 1 in New Orleans, Louisiana, were in a primarily urban environment. Among the physicians there were family practitioners, internists, and a specialist in epidemiology and community medicine who happened to be a Dean. We did not have a resident obstetrican in the group. Of the nurse educators, four of the seven had been involved in teaching obstetrical nursing either on a generic or advanced level. It was evident from the start that the group would indeed yield a broad perspective.

Dynamics

The first piece of business attacked was to attempt to agree on the tasks at hand (that is, to set up group objectives). This was no small chore! The adage goes that "often from chaos comes order" and a rather chaotic rocky start there was. Our group confessed from the outset that its members held divergent philosophies, different program structures, and peculiar objectives stemming from both individual programmatic response to not only community health needs (that is, the epidemiology of indigenous disease patterns) but also the regional health care delivery systems (exemplified by the recurring refrain of rural versus urban). The confession process was spirited rather than laconic. But given all these variables, we still reached a prefatory agreement on three goals. They were to (1) try to develop a common language with Ob/Gyn curriculum referents, (2) rate the content items of the curriculum list according to the code, and (3) clarify those identified problem areas by descriptive qualification. It was also strongly agreed that a common core of didactic Ob/Gyn content belonged across the board in all FNP curricula of institutions claiming to prepare family or Ob/Gyn practice. This was stressed, reiterated and felt to be vital.

Process of Accord

The rating process itself was accomplished rather swiftly and the final tally of content coding can be seen in table 6. As is apparent, the group felt that all the topics did indeed belong in the basic unit on Ob/Gyn in any FNP program. Granted there would be some differences in depth based on the program purpose and definition of the program product. While reaching this decision, a common language seemed to be established as far as content items were concerned by clarification of issues—eliminating many of the "what ifs," "supposing," and "that depends."

Process of Coding

The final rating code shows that some category collapsing was done. In a few instances separate topics were retained, but under a genre umbrella; for instance, the pelvic tumors and vulva vaginal lesions group was collapsed under pelvic masses, and the type of knowledge needed was described as recognition knowledge rather than superficial or limited. Recognition knowledge, it was stipulated, can be reached after student exposure to various concepts and practical clinical application of the concepts. But perhaps the pathophysiology and psychodynamics involved would vary and moreover might be covered less than they would should management knowledge be needed for a specifc area. The items which were categorized as level 2 were those which did assume recognition knowledge—sufficient knowledge to recognize the condition but not to render a differential diagnosis and/or determine therapeutic management.

Some of the health problems that were rated in category 3 (that is, collaborative management) made the assumption that the nurse would employ nonsurgical treatment modality in the management of the condition. Rectoceles, cystocele, and Bartholin cysts would be examples of this.

Eliminated from the curriculum was management of the intrapartal period with the exception of the principles of fundamental emergency childbirth. It was strongly felt that family nurse practitioners, Ob/Gyn nurse associates, and family planning nurse practitioners are certainly not midwives and should not be trained to undertake deliveries.

The one hot potato which the group nobly struggled with was the issue of IUD insertion. Although the group agreed that the nurse practitioner may appropriately run family planning clinics, that may not always include the insertion of intrauterine devices. Not so ironically, this was the one case where we could not quite rid ourselves of "that depends." The decision to include the skills needed for IUD insertion is truly dependent on the site and scope of practice of the product of a nurse practitioner training program, as well as regional needs. Also the decision to include or exclude this particular skill is influenced by programmatic time impingements and the amount of clinical experience available.

Discussion

Along with the discussions of didactic elements flowed a common concern for meaningful concomitant general clinical experience. Everyone shared the feeling that there are problems in provision of practicums which are truly beneficial learning experiences. The group further addressed the question of what proportion of time or percent of time within the overall program should be devoted to specialty areas such as Ob/Gyn and pediatrics, and they concurred that this would be fertile ground to explore in more detail. In addition, the hope was voiced that with a fairly standardized curriculum for the education of nurse practitioners would come the development of good teaching tools, such as models and texts, which would in turn strengthen learning methodologies.

Recommendations

Specific recommendations which have implications for further dialogue were made by the group members. One basic premise assented to was that cooperation yields strength. Voluntary and relatively formal binding together of the academic institutions supporting nurse practitioner programs would enhance the educational process itself and contribute to setting those necessary standards.

Future topics that may well prove worthwhile to explore were listed as (1) how to develop a continuing education support system for practicing FNPs through the development and implementation of continuing education events, (2) structuring valid evaluation modalities, including possible source versus performance audit, both concurrent and retrospective, (3) the possible inclusion of additional curricular issues in expanding role programs, such as traditional preventive medicine which would seem to lend itself well to the expanded role of nursing practice, (4) principles of practice negotiation, including economic factors, community politics, and FNP-PA relationships, (5) methods of financing programs—seeking and securing alternative sources of funds.

A concluding chord struck by group consensus was that the conference of nurse practitioner programs might be a viable unit and/or power base to articulate the need for approved third party payment to nurses as primary care agents. This, I belive, very well attested to the overall confidence in and dedication to the development and growth of the nurse practitioner movement. In fact, it was indeed a bright note (looking to the future) to end the deliberations on determinants of Ob/Gyn curriculum in nurse practitioner programs.

Table 5.—Nurse practitioner survey[1]

	Percent of NPs rating:				
	4	3	2	1	0
MENSTRUATION/GYN AND BREAST DISEASE					
Physiology of:					
Menarche	68	5		23	4
Menopause	64	18		14	4
Abnormalities of:					
Dysmenorrhea	59	41			
Amenorrhea	27	73			
Menorrhagia*	23	77			
Intramenstral bleeding	27	73			
Pelvic infections					
Vulvo vaginitis					
Candidiasis	100				
Trichomoniasis	100				

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[1] N = 22. All in active practice for at least 1 year.

[2] Five percent undecided.

NOTE: Items marked with asterisks are problem areas needing clarification.

Rating key: Ratings which indicate inclusion in curriculum:

4—FNP would manage within prescribed protocols without consulting physician

3—FNP would manage *only* in consultation with the physician

2—FNP would never manage, would always refer to a physician

Ratings which indicate noninclusion in curriculum:

1—FNP expected to enter program with sufficient knowledge and skill

0—Beyond the scope of FNP practice

Table 5.—Nurse practitioner survey—continued

	Percent of NPs rating:				
	4	3	2	1	0
Hemophilus vaginitis*	91	9			
Condylomata acumineta[2]*	59	36			
Herpes type II[2]*	50	45			
Atrophic vaginitis*	82	18			
Cervicitis[2]*	68	27			
Erosion, ectopy, eversion*	41	59			
Nabothian cysts*	55	45			
Bartholin cysts*	36	64			
Inguinal lymphadenopathy[2]*	27	64	5		
Patient education					
Physiology of conception and pregnancy[2]	68			23	4.5
Psychological changes	77			18	5
Preparation for labor and delivery	77	9		14	
Sexual needs	73	9		18	
Preparation for parenthood	73	9		18	
Anemia in pregnancy*	52	43	5		
Diabetes mellitus in pregnancy*	5	52	39	4	
RH sensitivity* and ABO incompatibility		36	59	5	
Toxemia*	4	38	50	4	4
UTI	32	64	4		
Spotting	14	68	14	4	
Common complaints of pregnancy	77	18	5		
Abnormalities:					
Abruptio placenta		13	78		9
Ectopic pregnancy		13	74		13
Hydatidiform mole		18	73		9
Hyperemesis gravidarum	4	39	48		9
Placenta previa		13	74	4	9
Polyhydramias		13	78		9
Fetal death		17	74		9
Multiple gestation	4	43	44		9
Threatened abortion	4	30	57		9
Emergency delivery*	33	44	17		6
Postpartum care					
Major anatomical & physiological Changes	55	32		13	
Puerperal infection	14	32	50	4	
Delayed postpartum hemorrhage	4	22	70	4	
Subinvolution	9	30	57	4	
Hemorrhoids	74	26			
Breast engorgement	71	21	4	4	
Thrombophlebitis*	12	46	38	4	
UTI	68	32			
Postpartum exercises	90	5			5

Table 5.—Nurse practitioner survey—continued

	Percent of NPs rating:				
	4	3	2	1	0
Hypertension*	27	64	9		
Infected episotomy*	36	59	5		
PID					
Acute with peritonitis[2]*	5	32	59		
Acute without peritonitis*	27	55	18		
Chronic with ovarian abscess		36	64		
Chronic without ovarian abscess*	13	64	23		
Pelvic tumors					
Ovarian tumors and cysts		27	64		9
Uterine myomas*	5	32	50	5	8
Cervical and uterine polyps*	9	30	57		4
Vulvo vaginal lesions*	9	36	50		5
Endometriosis* & endometritis	5	45	45		5
Problems of pelvic relaxation					
Uterine Prolapse*	5	41	54		
Cystocele*	14	45	41		
Rectocele*	14	45	41		
Breasts					
Carcinoma		32	64		4
Cystic disease*	13	65	22		
Chronic mastitis*	13	62	25		
Benign tumors of the breast*	14	55	31		
PREGNANCY, DELIVERY, POSTPARTUM CARE AND CONTRACEPTION					
Prenatal care					
Diagnosis & dating of pregnancy[2]	77	18			
Initial assessment of the pregnant woman					
History	96	4			
Physical exam	86	9	5		
Laboratory test	95	5			
Followup examinations	95	5			
Patient Education					
Psychological changes	77			18	5
Preparation for parenthood	77			18	5
Breast feeding	86			9	5
Sexual needs in postpartum period	77			18	5
Contraception					
Oral contraceptives	83	17			
IUD*	46	33	13		8
Foam and condom	90	5		5	
Diaphragm/cream	86	14			
Rhythm	90	5		5	

Table 6.—Final coding tally made by group participants

	Rating scale				
	4	3	2	1	0
GYN AND BREAST DISEASE					
Menstruation					
Physiology of					
Menarche	X				
Menopause	X				
Abnormalities of					
Dysmenorrhea	X				
Amenorrhea		X			
Menorrhagia		X			
Intramenstral bleeding		X			
Pelvic infections					
Vulvo vaginitis					
Candidiasis	X				
Trichomoniasis	X				
Hemophilus vaginitis	X				
Condylomata acuminata[1]	X				
Herpes type II		X			
Atrophic vaginitis	X				
Cervicitis		X			
Erosion, ectopy, eversion		X			
Nabothian cysts		X			
Bartholin cysts		X			
Inguinal lymphadenopathy		X			
PID					
Acute with peritonitis			X		
Acute without peritonitis			X		
Chronic with ovarian abscess			X		
Chronic without ovarian abscess			X		
Other—endometritis			X		
Pelvic Masses					
Ovarian tumors and cysts			X		
Uterine myomas			X		
Cervical and uterine polyps			X		
Vulvo vaginal lesions			X		
Endometriosis			X		

NOTE: Rating key:
Ratings which indicate inclusion in curriculum:
4—FNP would manage within prescribed protocols without consulting physician
3—FNP would manage *only* in consultation with the physician
2—FNP would never manage, would always refer to a physician
Ratings which indicate noninclusion in curriculum:
1—FNP expected to enter program with sufficient knowledge and skill
0—Beyond the scope of FNP practice

Table 6.—Final coding tally made by group participants—continued

	Rating scale				
	4	3	2	1	0
Problems of pelvic relaxation					
Uterine Prolapse			X		
Cystocele		X			
Rectocele[1]		X			
Other—eterocele			X		
Breasts					
Masses			X		
Cystic disease		X			
Chronic mastitis		X			
PREGNANCY, DELIVERY, POSTPARTUM CARE AND CONTRACEPTION					
Prenatal Care					
Diagnosis & dating of pregnancy	X				
Initial assessment of the pregnant woman					
History	X				
Physical exam	X				
Laboratory test	X				
Followup examinations[2]	X				
Patient education					
Physiology of conception and pregnancy	X				
Psychological changes	X				
Preparation for labor and delivery	X				
Sexual needs	X				
Preparation for parenthood	X				
High risk category					
Anemia in pregnancy					
Physiological		X			
Dyscrasia			X		
Diabetes mellitus in pregnancy					
Gestational		X			
Pre-existent			X		
RH sensitivity and ABO incompatibility		X			
Toxemia					
Pre-eclampsia		X			
Eclampsia			X		
UTI					
Cystitis		X			

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[1] Management without surgical intervention.

[2] Pelvic measurements excluded—should be performed by individual planning to do delivery.

[3] Depends on practice and program parameters.

Table 6.—Final coding tally made by group participants—continued

	Rating scale				
	4	3	2	1	0
Nephrosis			X		
Spotting		X			
Common complaints of pregnancy	X				
Prenatal abnormalities					
Abruptio placenta			X		
Ectopic pregnancy			X		
Hydatidiform mole			X		
Hyperemesis gravidarum		X			
Placenta previa			X		
Polyhydramias			X		
Fetal death			X		
Multiple gestation		X			
Threatened abortion		X			
Emergency delivery	X				
Postpartum Care					
Major anatomical & physiological changes	X				
Puerperal infection			X		
Delayed postpartum hemorrhage			X		
Subinvolution		X			
Hemorrhoids	X				
Breast engorgement	X				
Thrombophlebitis			X		
UTI (Cystitis)		X			
Postpartum exercises	X				
Hypertension (essential)		X			
Infected episotomy	X				
Patient education					
Psychological changes	X				
Preparation for parenthood	X				
Breast feeding	X				
Sexual needs in postpartum period	X				
Contraception					
Oral contraceptives	X				
IUD					
Management of patient with IUD		X			
Insertion[3]		X			X
Foam and condoms	X				
Diaphragm/cream	X				
Rhythm	X				

REPORT OF THE FAMILY AND COMMUNITY GROUP

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Margaret Sheehan, R.N. (Division of Nursing)

Participants of the group were representative of graduate and certificate programs which prepare family nurse practitioners. The group spent considerable time sharing information about the curricula of the programs represented by each of the participants.

The group then began their discussion of curriculum content by assessing the high level of disagreement among the ratings assigned by physician and nurse respondents in the area of family and community health. It was interesting to note that several nurse and physician respondents expected students to enter the program with sufficient knowledge in family and community health. In addition, there were many respondents who indicated that these same content areas were essential and should be included in the curriculum. It was evident to the group that there was overlap between what students should know prior to entering a program and what should be considered essential content in the curriculum. When the content areas representing preprogram knowledge expectations were combined with the same categories which were rated as essential curriculum content, there was high agreement among respondents. The group decided that the rationale for assigning the ratings might be related to the type of program, certificate or graduate, with which the respondent was affiliated. There was group consensus that we would not spend additional time attempting to clarify areas of disagreement. Also, we agreed to take the issue of depth and levels of content.

The group then attempted to identify broad categories of content which the members considered essential for the areas of family and community. However, the group found it difficult to limit the discussion to the curriculum content identified for the family and community section. There was general agreement that much of the content identified for family and community could be integrated within the sections on child health, adult medicine, or Ob/Gyn.

The group identified several areas of emphasis and/or questions regarding the content on family and community. These included the following:

- There is a need for faculty to provide mechanisms for assisting students with the application and integration of knowledge in clinical practice.
- The primary focus of this aspect of the curriculum should be the application of knowledge to clinical practice and the FNP role.
- The population to be served (i.e., urban vs. rural) should be considered in designing the curriculum.
- Does the FNP work with an individual concerning the ways in which his or her illness affects the family and the ways in which the family affects the individual's health state; or, does the FNP work with family members individually? Also, are FNPs working with the family as a unit, a total constellation, or primarily with the individual?
- Emphasis must be given to individual and family rights and both must be involved in decisions about their health care.
- The value system of the FNP must be assessed and appreciated as such.
- Given the nature of society today and the roles and structure of families, alternative groups as replacement for families must be considered.
- The concept of contract negotiations with the family and family members is essential.
- Contacts with families are frequently initiated as a result of the FNPs relationship with an individual family member.
- Problem-solving should be the emphasis throughout the curriculum.
- FNPs should be prepared to provide preventive, supportive and therapeutic interventions to individuals and families based upon knowledge of crisis, family structures and interactions, and skills in problem-solving and management.

The group developed the following list of topics for inclusion in the curriculum.

Topic Listing

- Developmental theories, tasks and adjustments
  - Individual (conception to death)
  - Family as a social system
    - Traditional
    - Alternative

- Interactional concepts
  - Role relationships
  - Communication patterns
  - Decision making
    - Choice
    - Control
    - Compliance
  - Adaptive mechanisms/coping

- Normative and dysfunctional crisis
  - Conceptual framework
    - Maturational
    - Situational
  - Recognition and definition of clinical manifestations of crisis
    - Anticipatory needs assessment
    - Risk factors (epidemiology)
    - Somatic manifestations
    - Change of, or alterations in, behavior patterns
    - Development of a data base
  - Management interventions
    - Concepts of contract negotiations
      - FNP values and attitudes
    - Types of management
      - Short term
      - Long term
    - Techniques/strategies
      - Anticipatory guidance
      - Counselling and interviewing
      - Referral resources

- Community
  - Health systems (urban/suburban/rural)
  - Structure and organization
  - Health care resources

Analysis of influence on program planning and implementation
Assessment criteria

Health systems evaluation
Practice analysis (structure)
Process and outcome measures
Peer review, audit, PSRO
POMR, standards of practice
Competency based criteria
Economic/cost factors
Management practices and procedures
Clinic/practice operations
Personnel

Summary

There was general consensus that the specific design and organization of a curriculum will determine the arrangement of and emphasis upon content. However, the conferees identified essential broad content areas for family and community as follows:

- Knowledge of the family as a social system, including alternatives to the traditional family structure.
- Knowledge of crisis and the impact of crisis upon the family.
- Knowledge of the significance of change as a precipitator of crisis with the family.
- Interventions utilized to assist the family with crisis definition and resolution.
- Knowledge of community and community organization.
- Knowledge of evaluative mechanisms available to assess the quality of health care delivered, including structure, process, and outcome measures.

The participants agreed that the preliminary work of this group should be considered as general in nature and scope. The group believe that the ongoing development of relevant content for FNP programs in the area of family and community will of necessity depend upon the identification of behavioral objectives. These will result in more specific content appropriate for the level of the expected behavior.

One crucial issue requiring attention and resolution is the extent to which a product of an FNP program will be expected to engage in family nursing and/or family centered nursing. One participant expressed the opinion that graduate programs might wish to consider the preparation of practitioners for family nursing and that graduates of certificate programs could be prepared with a family-centered nursing approach.

Recommendations

- Plan for another meeting which would allow for rap sessions between programs and time for certificate and graduate programs to meet alone.
- Include in the agenda for a subsequent meeting a discussion of behavioral objectives, determination of appropriate levels of content, clinical performance evaluations and teaching strategies.
- Consider the addition of content on the evaluative and management aspects of practice settings, including process, structure, and outcome measures.

TEACHING ROLE REALIGNMENT: THE PRESENT STATE OF THE ART

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Introduction

This report will attempt to summarize the proceedings of the group on role realignment. Based on the original Curriculum Outline Rating Scale completed by all participants before the conference, and the Summary of Agreement/Disagreement Among Respondents to the scale, a revised topic listing was arrived at by consensus during the group session on role realignment. The revised list is incorporated in the body of this report.

This revised list was not intended by the group to be projected as a curriculum or course outline in the strictest or traditional sense. Rather, the list reflects the content and concepts deemed *essential* by the group to be included in a family nurse practitioner program. The first part of this report will focus on the discussions pursuant to the four major headings as delinated in the original curriculum rating scale. The second part of the report will focus on the general discussions related to the more general and complex issues surrounding the FNP role.

The Group and Their Process

The group was composed of seven nurses and five physicians; two group members represented master's programs with the remaining representing certificate programs. The members possessed varying amounts of experience with nurse practitioner programs—ranging from 1 year to 6 years. There was also a wide geographic distribution amongst group members—from coast to coast and north to south.

Unlike the other groups, the role realignment group did not have difficulty getting started. For one thing, the group did not have an overwhelming amount of data before them as compared to some of the other groups who had seven or eight pages of material to discuss and digest. But probably more importantly, differences in the level of programs (master's vs. certificate) and the practice settings of graduates (rural vs. urban, generalized vs. specialized, etc.) were not expected to significantly affect the group's consideration of its topic. It was recognized that the major concern of the group, role realignment, was a concept common to all programs regardless of their differences.

However, the group was not without its trials. It was anticipated that, because of the lack of discreteness in the topics, the group would have difficulty focusing its discussion, and such was the case. The group also felt a need to discuss more than just the task outlined. Members expressed interest in discussing both methods of dealing with role realignment and the general issues involved in the whole process of role change. Given all the above, the group decided to first complete its task and identify the content and concepts related to role realignment essential for inclusion in curricula, and secondly, to engage in a discussion regarding methodology and the process of role change. Despite wandering and difficulty in focusing discussion, the process was worthwhile and stimulating.

Content and Concepts

As mentioned earlier, the following topic listing is not intended as a course outline in the traditional sense. Nor are the topics listed in any order of priority, sequence, etc. The listing is a delineation of those topics essential for inclusion in nurse practitioner programs in some way, shape, or form. As Dr. Katherine Nuckolls in her opening address warned, and as reiterated during the group session, we must be careful not to leave important concepts to change, to be caught instead of taught. Therefore, the following list is offered with the hope that such topics will be dealt with in curricula in some overt and conscious manner.

Topic Listing

- Trends affecting health care delivery and FNP role
  - National legislation
    - Health Planning Act
    - PSRO
    - National health policies
  - State legislation
  - Concepts of health and illness
  - Professional organizations
  - Peer review/audit systems/quality assurance
  - Agency-community relations and consumer boards
  - Economics
  - Malpractice and liability insurance

- Primary care delivery systems
  - Models of delivery systems
    - Traditional systems
    - New emerging systems
  - Primary care—components and characteristics
  - Practice management
    - Patient payment mechanisms
    - Compensation issues
    - Communications systems
    - Information systems
    - Job description

- Emerging health roles
  - Physician's assistance/associates
  - Midwives
  - Other nurse practitioners (PNP, GNP, etc.)
  - Clinical pharmacists
  - Community health workers
  - Clinical specialists and nurse clinicians

- Family nurse practitioner role
  - Nurse-patient relationship
  - Nurse-nurse relationship
  - Nurse-physician relationship
  - Nurse-community relationship
  - Nurse-agency relationship
  - Accountability and responsibility
  - Legal implications
  - Patient advocacy
  - Role of change agent

Process of role change
Philosophy of the role model
Role scope

The group spent 3 hours deliberating and arriving at the above list and several things merit comment. Only one topic from the original curriculum rating scale was deleted and that was "professionalism." This topic caused a problem primarily of definition. It was also felt that many of the concepts embodied in the term "professional" were included elsewhere and it would therefore be redundant to include it in the listing. Besides, if it was included, it was a term that most likely would have to be defined and the group did not want to undertake that task.

Several topics were added to the original Curriculum Rating Scale, as can be seen by a comparison of the two lists. However, one area received considerable discussion—economics.

Even though there is growing acceptance of the concept of the nurse practitioner role model, it was felt that, in order for the concept to remain viable, the role must be economically feasible and realistic. Because nurses in general are somewhat naive about the economic facts of life involved in health care delivery, they need an opportunity to learn about the economic realities that will affect their practice. This should include patient payment mechanisms, compensation issues, the dollars and cents of office management, etc. And, although nurse practitioners may not be directly responsible for the economic management of their practice, they should be able to estimate and define their own economic value.

Given the whole morning's discussion, there was one thing that the group emphatically agreed upon: that content, concepts and methods of dealing with role realignment were essential. We were not sure how to do it, but we did agree that it was essential.

General Issues

By the afternoon session, the group was ready to struggle with the more complex issues of methodology and what we all meant by "role realignment." This discussion took us along many paths and several interesting side trips. For the most part however, our discussion took us along three main routes. The first dealt with the stress and anxiety experienced by students during the educational process. The second route brought us to a debate on process versus content. And the third asked the question, what or who is the nurse practitioner?

Student Anxiety and Stress. Several participants described the methods used in their programs to deal with student anxiety, stress and revolt. Voluntary seminars to discuss problems and express feelings, led by a group process person or clinical psychologist, were used by several programs with some limited success. Other programs used the advisor system; in still others, students sought their own help. Some programs tried the above alternatives on a mandatory basis. But although many of the above, either alone or in combination, had brought some success, the group did not feel comfortable with these methods as a solution to the problems of student stress and anxiety.

The stress and anxiety experienced by nurse practitioner students are well documented in the literature and the group's experiences reinforced what has been described. Many factors affecting the levels of stress felt by students were identified—resumption of the student role, a highly intensive educational experience, and the students' changing role in clinical situations, affecting both their relationship with patients and with physicians. It was also suggested that some of the anxieties are induced by faculty. Faculty emphasize responsibility and accountability but provide students with limited amounts of information. The experience of being close to the edge of the law was also said to frighten students. Furthermore, the shortness of training itself causes terrible anxiety. FNP students do not, like other students, have the opportunity to go over something several times. One participant seemed to summarize the feelings of the group. She described a monograph about a nurse practitioner training program she had read 3 or 4 years ago. The monograph, she said, described difficulties with student anxiety but the authors felt assured that the problems would be resolved with the addition of a clinical psychologist the following year. She added, "You know, 4 years later we're still talking about it, and I'm sure they are too!"

Process vs. Content. There was considerable discussion among group members on whether to teach process or content. The group wondered whether they were all teaching the same core content and whether their expectations of graduates were similar. One participant's program taught process, expecting the nurse to get content in her preceptorship. Another felt it was impossible to depend on osmosis; people could go for years without seeing things.

The question was raised, is it an either/or matter? The FNP is prepared to function in a primary care, ambulatory setting. That is a kind of definition. In learning this process, she does need to know a certain defined list (content) by which she practices this process.

What then is the process? The process is a problem-solving process taught as problem recognition leading to a course of action—in some cases treating, in others referral. The basic process includes defining the problem by working through the history and physical examination and coming to a problem definition which leads to a course of action.

Most of the group felt that process and content were not mutually exclusive. Process could not be taught in a vacuum and some content was necessary for a nurse practitioner to practice competently.

However, it was emphasized that we must be careful not to lose process in the teaching of content. The primary goal is to teach a process whereby the nurse practitioner can continue to grow and learn beyond her basic preparation.

What is a Nurse Practitioner? The terms "problem recognition" and "problem definition" led the group to ask, "Is this diagnosis?" and "Is it medical diagnosis?" These questions led to "What is a nurse practitioner?" We had spent nearly all day discussing it, assuming we all meant the same thing. And, even though the vast majority of the group held the same definition of the nurse practitioner, raising the question was well worthwhile.

We reaffirmed our beliefs that the nurse practitioner will not only increase the quantity of care, she will also improve the quality; that the nurse practitioner is not a doctor substitute, but in fact, a nurse practitioner-physician team can provide better care than either alone.

And the group did agree that nurse practitioners do diagnose. The group did not buy into the dichotomy of medical diagnosis, medical treatment versus nursing assessment, nursing intervention. To define a problem is to diagnose, whether it is a medical diagnosis of leukemia or a psychosocial diagnosis of grief. Defining a problem is more than differentiating between normal and abnormal. Defining the health and developmental problem is diagnosis whether it is medical, psychosocial or nursing.

One FNP summed up the feelings of several nurse practitioners in the group: "I get very angry with all this division between nursing and medicine. I see myself as delivering health care. And that depends on the need I'm attempting to deal with." And someone added—"the patient's need, not the doctor's need, not the nurse's need."

Summary. The group did not make any formal recommendations—we were into heavy discussion about debatable topics, and we were not ready. However, there was a general sense that we had worked in isolation, in five groups, on curriculum, and we desperately needed a perspective on the whole.

As a group, we did not have as many answers as we had questions. The group felt there was more to discuss, that we were not finished but had just begun. One group member summarized his reaction to the group session by saying: "I've been extremely interested, and it was a super good thing for me to come and just listen to all the variability, because when you're in your own program, and it's as new as it is, and most of the faculty are as new as they are, I think the best thing we can do is just talk about common problems and realize that everyone's sharing the same kind of anxieties." We did share some solutions and successful approaches; we also raised areas of concern. All this represents our collective view of the state of the art.

SUMMARY OF RECOMMENDATIONS

Recommendations for the future were obtained through (1) group reports, (2) discussion among participants as a whole, (3) evaluation forms distributed on the last day of the conference, and (4) a later meeting of the directors and group leaders of the conference.

Implicit in the group reports are recommendations concerning curriculum content for the preparation of FNPs. Although there was some attempt to deal with the depth of content in relation to the expected functions of the practitioner, as in the report from the pediatrics group, there was no opportunity for intergroup discussion to find out if there were gaps or overlays in recommendations or to establish priorities for the total curriculum. Group reports reflect the frustration produced by the lack of opportunity for communication between groups. Through all the feedback mechanisms provided, there came a strong recommendation that another conference be planned as a followup to this one. Unresolved issues of cirriculum objectives and content and further exploration of clinical evaluation were considered of prime importance.

There was a broad spectrum of recommendations concerning various emphases within the curriculum as well as topics for future discussion. Many felt more emphasis should be placed on the problem-solving approach (rather than on specific disease content), on psychosocial and behavioral aspects of care, and on prevention and promotion of health. A need for flexibility in the role of the practitioner and consequently the curriculum was debated, since needs of geographical areas (urban versus rural) or ethnic groups vary. Yet there was consideration of the need for a common core to provide for the mobility of the practitioner. Questions arose as to levels of performance expected in relation to the type of academic preparation of both the entering student (diploma, associate degree, baccalaureate degree) and the product of the FNP program (certificate or master's degree). Recommendations were made that all of these issues in addition to other issues generic to all nurse practitioner programs, such as principles of practice negotiation, financing and third party payment, be addressed in a future meeting.

Consideration was given to planning the next meeting with faculties from nurse practitioner programs in specialty areas such as pediatrics, ob/gyn, occupational health, etc. There was a general consensus that generic issues are subjects for a conference involving all kinds of nurse practitioners. It was, however, the opinion of many participants, including the group leaders, that first a followup conference is needed to continue the task of dealing with matters peculiar to the preparation of FNPs and that for this purpose, participants in the next conference should be confined to representatives from FNP programs plus full-time practicing FNPs.

More time was requested for informal contacts and for opportunities for similar programs to get together, i.e., master's programs or certificate programs.

Considering the above sense of need, the directors and group leaders at a meeting subsequent to the conference made the following recommendations:

- That a task force be established to:
  - organize the material produced by the five groups in some way to facilitate consideration of priorities within the curriculum (further use of the rating scale was not recommended);
  - plan two more conferences of three days each within two years, with the emphasis to be placed on curriculum in the first one and on evaluation in the second one;
- That the task force be representative of:
  - the five groups at the past conference;
  - nurses and physicians;
  - master's and certificate programs;
  - programs preparing for both urban and rural areas; and
  - a full-time practicing FNP, who would be added to the task force for future planning;
- That funds be sought for the above purposes.

The Editors

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